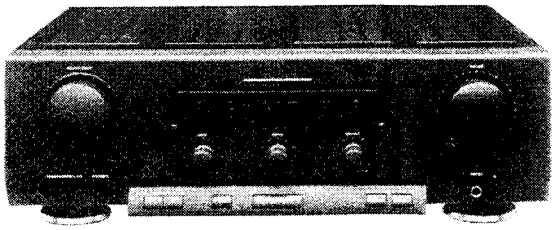
Amplifier 70FA920/00S

/05S/01S

Service
Service
Service



ServiceManual

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PHILIPS

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SPECIFICATION

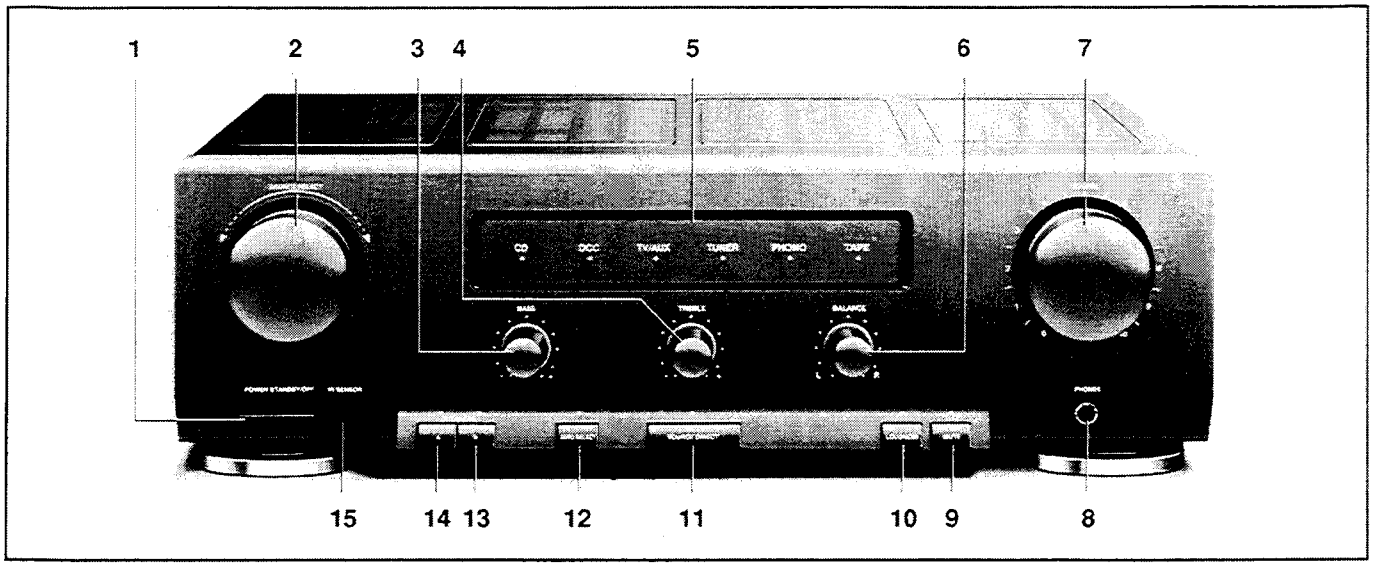
General:

Mains voltage	:220V 50Hz for/00 :240V 50Hz for/05/10 :115/230V 50Hz for/01
Power consumption	:≤ 180W at 2x40W output power :≤ 20W at stand by
Dimensions:(wxhxd)	:435x124x300 mm

Amplifier:

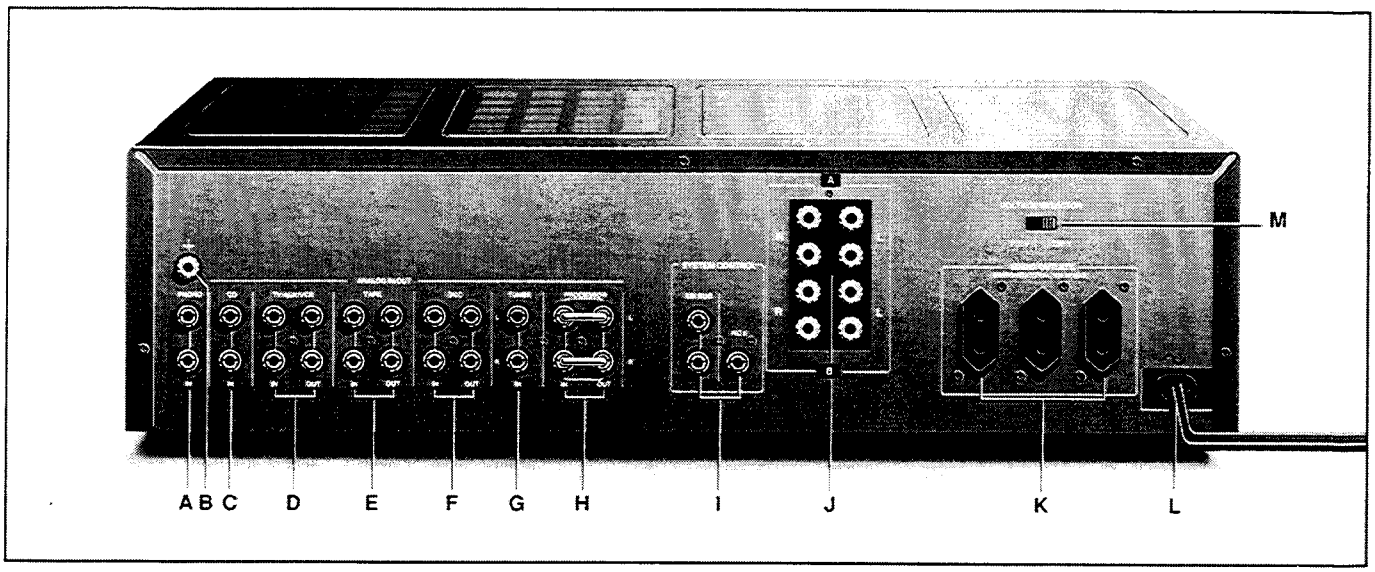
Output power &	:2x40W at 8Ω D = ≤0,7%(IEC)
	:2x55W at 4Ω D = ≤0,7%(IEC)
Distortion (D)	:2x35W at 8Ω D = ≤0,05% (at 1kHz)
	:2x30W at 8Ω D = ≤0,09% (20Hz...20kHz)
Music power	:2x70W
Sign.Noise:	
Phone input (5mv)	:≥75dB (A-curve weighted)
Other inputs (500mv)	;≥95dB (A-curve weighted)
Crosstalk :	
Between channels	:≥50dB (100Hz.....10kHz)
source	:≥65dB (100Hz.....10kHz)
Headphone	:6,3mm stereo jack
Output voltage	:≥5V EMF Value
Output impedance	:120 Ω ±10%
Frequency response	:20Hz -20kHz ≤1dB
Tone controle	:Bass +10dB to -10dB ±2dB at 80Hz
	:Treble +10dB to -10dB ±2dB at 10kHZ
	:Loudness +6dB ±2dB volume ≤-40dB at 100Hz
	+4dB ±1,5dB volume ≤-40dB at10kHz
Input sensitivity	:Tuner 150mV Ri ≥ 20kΩ
	:TV/VCR 150mV Ri ≥ 20kΩ
	:CD 150mV Ri ≥ 20kΩ
	:Tape 150mV Ri ≥ 20kΩ
	:DCC 150mV Ri ≥ 20kΩ
	:Process 150mV Ri ≥ 20kΩ
	:Phone/MM 2,5mV Ri ≥ 47kΩ/220pf
Output voltage	:TV/VCR 150mV Ro < 2k5
	:Tape 150mV Ro < 2k5
	:DCC 150mV Ro < 2k5
	:Process 150mV Ro < 2k5

CONTROLS



		Pos.nr.
1)	Standby + acknowledge led	D6648
	Power off/standby button	1525
2)	Source sel.knob + Mag.Touch	1605
3)	Bass knob	3651
4)	Treble knob	3652
5)	Display and indication led	
	CD indication led (red)	D6642
	DCC indication led (red)	D6643
	TV/AUX indication led (red)	D6644
	Tuner indication led (red)	D6645
	Phone indication led (red)	D6646
	Tape indication led (red)	D6647
6)	Balance knob	3603
7)	Volume knob	3601
8)	Headphone	1601
9)	Mute button + Red indic.led	1611 + D6640
10)	Loudness button + Red indic.led	1608 + D6635
11)	Source direct but. + Red indic.led	1606 + D6636
12)	Auto-select button + Red indic.led	1607 + D6639
13)	Speakers B-button + Red indic.led	1609 + D6638
14)	Speakers A-button + Red indic.led	1610 + D6637
15)	IR-receiver eye	6700

CONNECTIONS



			Pos.nr.
A)	Phone	input	1401
B)	Phone	ground	
C)	CD	input	1401
D)	TV/AUX/VCR	input	1401
	AUX/VCR	output	1401
E)	Tape	input	1402
	Tape	output	1402
F)	DCC	input	1402
	DCC	output	1402
G)	Tuner	input	1403
H)	Processor	in	1403
	Processor	out	1403
I)	Easy link	Bus	1261
	RC 5	Bus	1262
J)	Speaker system A	Right	1264
	Speaker system A	Left	1264
	Speaker system B	Right	1263
	Speaker system B	Left	1263
K)	Switched AC outleds		1926-27-28
L)	Fixed mainscord		
M)	Voltage selector (for/01 only)		

WARNINGS

GB

Safety regulations require that the set be restored to its original condition and that parts which are identical with those specified be used.

NL

Veiligheidsbepalingen vereisen dat het apparaat in zijn oorspronkelijke toestand wordt teruggebracht en dat onderdelen, identiek aan de gespecificeerde worden toegepast.

D

Bei jeder Reparatur sind die geltenden Sicherheitsvorschriften zu beachten. Der Originalzustand des Geräts darf nicht verändert werden für Reparaturen sind Original-Ersatzteile zu verwenden.

I

Le norme di sicurezza esigono che l'apparecchio venga rimesso nelle condizioni originali e che siano utilizzati i pezzi di ricambiago identici a quelli specificati.

F

Les normes de sécurité exigent que l'appareil soit remis à l'état d'origine et que soient utilisées les pieces de rechange identiques à celles spécifiées.

Pour votre sécurité, ces documents doivent etre utilisés par des specialistes agrées, seuls habilités à réparer votre appareil en panne.

GB WARNING

All ICs and many other semi conductors are susceptible to electrostatic discharges (ESD).
Careless handling during repair can reduce life drastically.When reparing, make sure that you are connected with the same potential as the mass of the set via a wrist wrap with resistance. Keep components and tools also at this potential.

NL WAARSCHUWING

Alle ICs en vele andere halfgeleiders zijn gevoelig voor electrostatische ontladingen (ESD)
Onzorgvuldig behandelen tijden reparatie kan de levensduur drastisch doen verminderen. Zorg ervoor dat U tijdens reparatie via een polsband met weerstand verbonden bent met hetzelfde potentiaal als de massa van het apparaat.
Houd componenten en hulpmiddelen ook op ditzelfde potentiaal.

D WARNUNG

Alle ICs und viele andere Halbleiter sind empfindlich gegenüber electrostatischen Entladungen (ESD).
Unsorgfältige Behandlung im Reparaturfall kan die Lebensdauer drastisch reduzieren. Veranlassen Sie, dass Sie im Reparaturfall über ein Pulsarmband mit Widerstand verbunden sind mit dem gleichen Potential wie die Masse des Gerätes.
Bauteile und Hilfsmittel auch auf dieses gleiche Potential halten.

F ATTENTION

Tous les IC et beaucoup d'autres semi-conducteurs sont sensibles aux décharges statiques (ESD).
Leur longévité pourrait étre considérablement écourtée par le fait qu'aucune precaution n'est prise à leur manipulation.
Lors de réparations, s'assurer de bien étre relié au meme potentiel que la masse de l'appareil et enfiler le bracelet serti d'une résistance de sécurité.
Veiller á ce que les composants ainsi que les outils que l'on utilise soient également á ce potentiel.

I AVERTIMENTO

Tutti IC e parecchi semi-conduttori sono sensibili alle scariche statiche. (ESD)
La loro longevità potrebbe essere fortemente ridatta in caso di non osservazione della più grande cauzione alla loro manipolazione. Durante le riparazioni occorre quindi essere collegato allo stesso potenziale che quello della massa dell apparecchio tramite un braccialetto a resistenza.
Assicurarsi che i componenti e anche gli utensili con quali si lavora siano anche a questo potenziale.

SERVICE TEST PROGRAM

Processor Test

The test can be called up by pressing the keys Loudness and mute at te same time when te amplifier is switched on.The following lamps and leds will now be lit. Step A (fig 1)

When any key is pressed the following lamps and leds will now lit. Step B (fig 1) Press again a key to step F and check every step. (fig 1)

When a key is pressed after step F the volume knob turns for about 4 seconds right and 4 seconds left. After the volume controle check a eeprom check is started. When after 0.2 seconds the magic touch is used to wake up the amplifier,the amplifier will come up with setting G (fig 1)

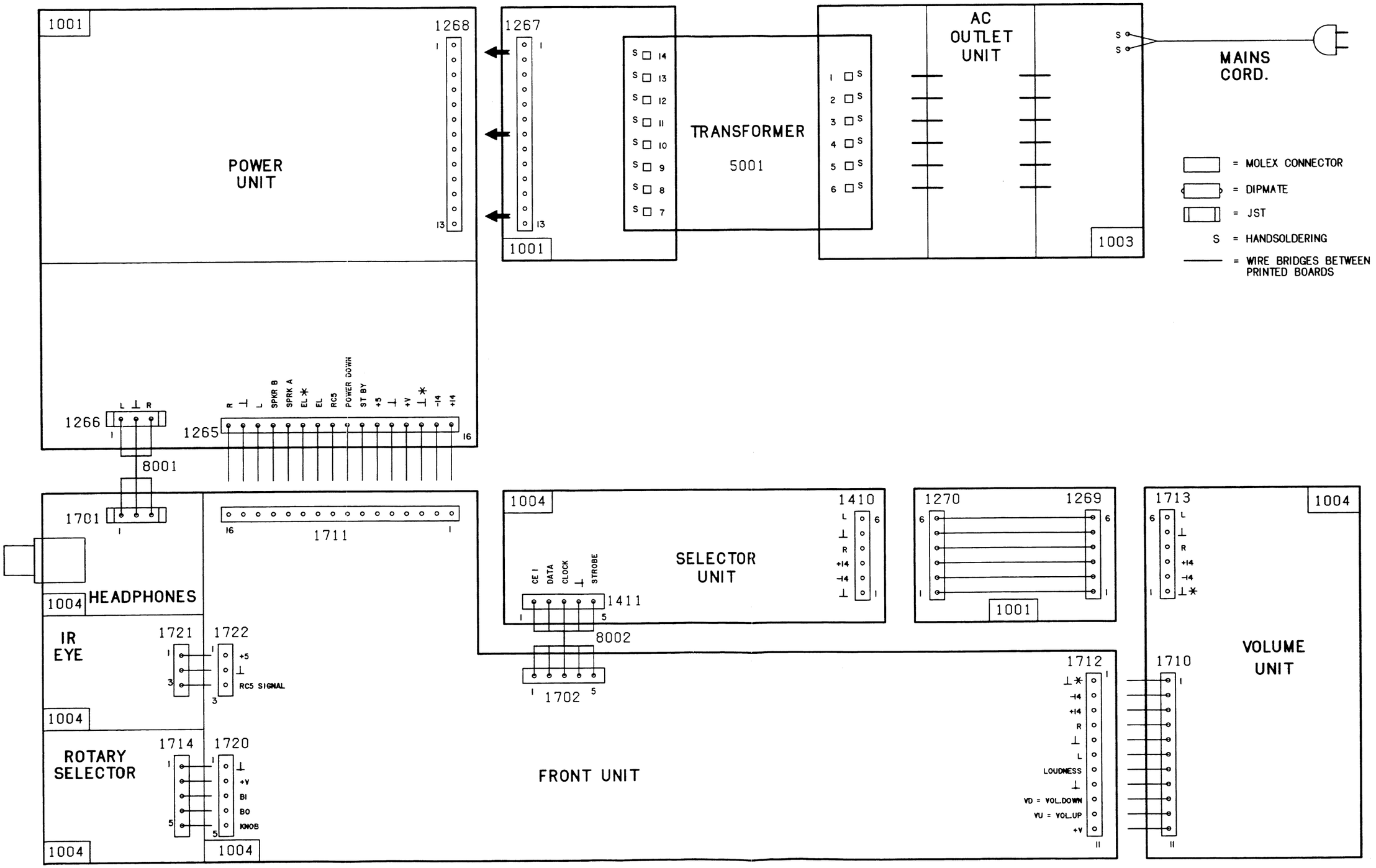
When setting G is wrong check eeprom!!

Steps	A	B	C	D	E	F	G
Indication Leds							
CD	off	off	off	off	off	on	off
DCC	off	off	off	off	on	off	off
TV/AUX	off	off	off	on	off	off	off
TUNER	off	off	on	off	off	off	off
PHONE	off	on	off	off	off	off	off
TAPE	on	off	off	off	off	off	on
Source Leds							
St/BY	on	off	on	off	on	off	off
Speak.A	off	on	off	on	off	on	on
Speak.B	on	off	on	off	on	off	off
Auto sel	off	on	off	on	off	on	on
Sour.Dir.	on	off	on	off	on	off	off
Loudness	off	on	off	on	off	on	on
Mute	on	off	on	off	on	off	off

Quiescent Current

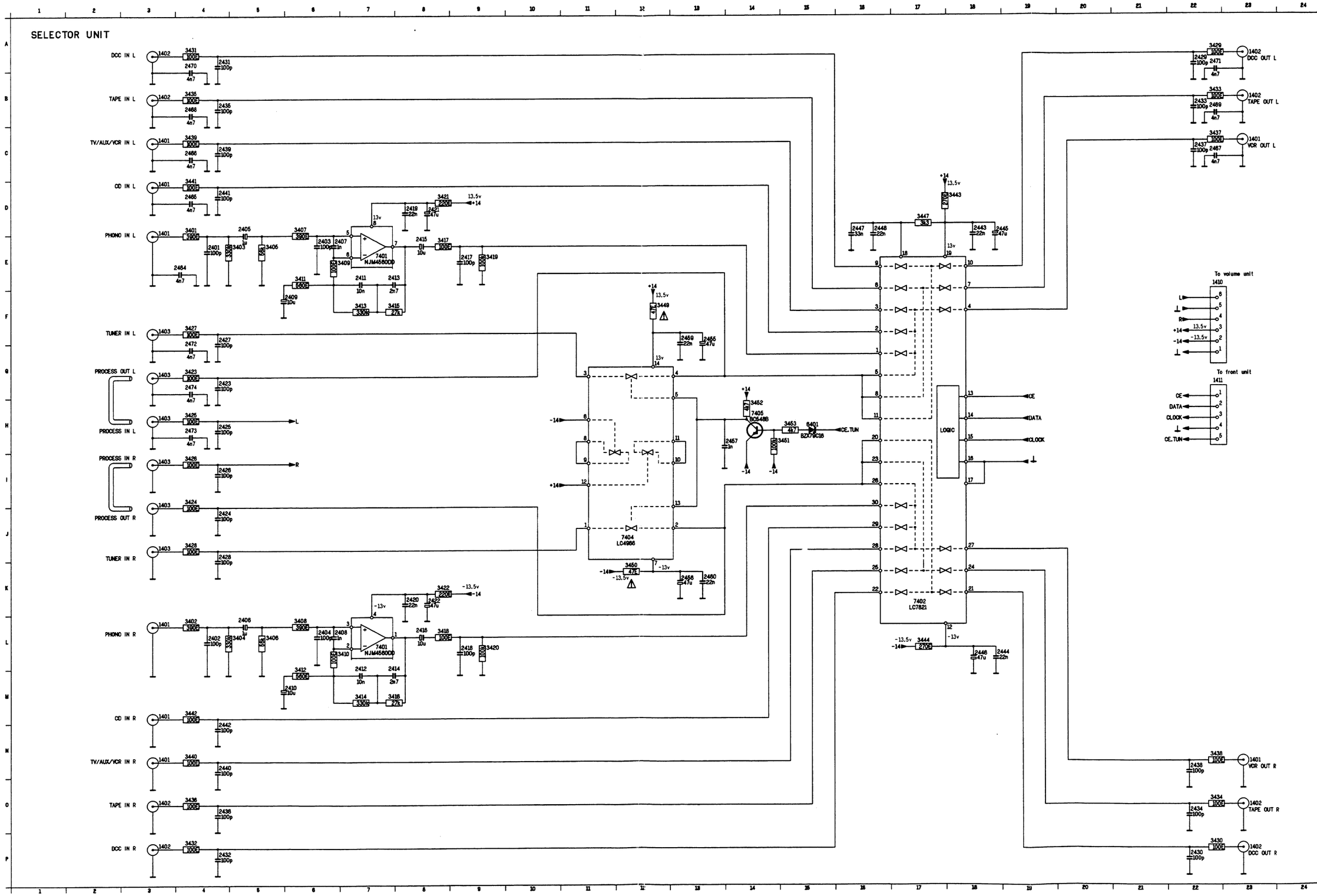
SK.... SWITCH	SIGNAL	TO	VOLUME	ADJUST	OSILLOSCOPE	D.C.METER INDICATOR
STAND - BY				L ch R 3285		L ch. 1 2 DC 6 mV
				R ch. R 3286		R ch. 3 4 DC 6 mV

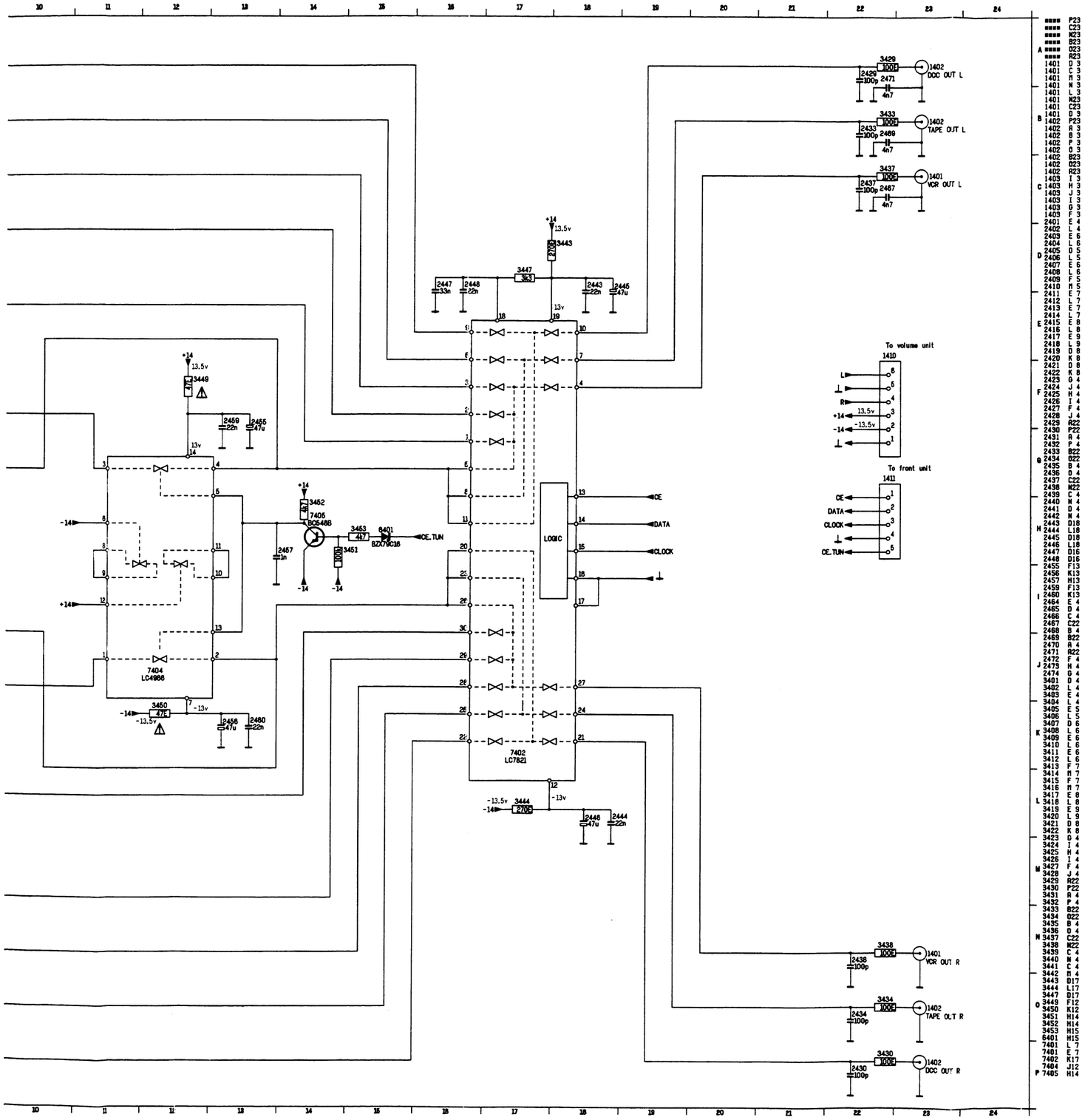
- Check for good thermal contact between power transistor and heatsink.
- Mains Voltage 220V /00 240V /05 5%
- Ambient themperature =20° 5° and heatsink must be atambient temperature.
- Set volume position to minimum.
- Disconnect speakers or place the set on stand-by position.
- Trimpotmeter in clock wize position.
- The adjustment must be finished for both channels 20sec after power on.

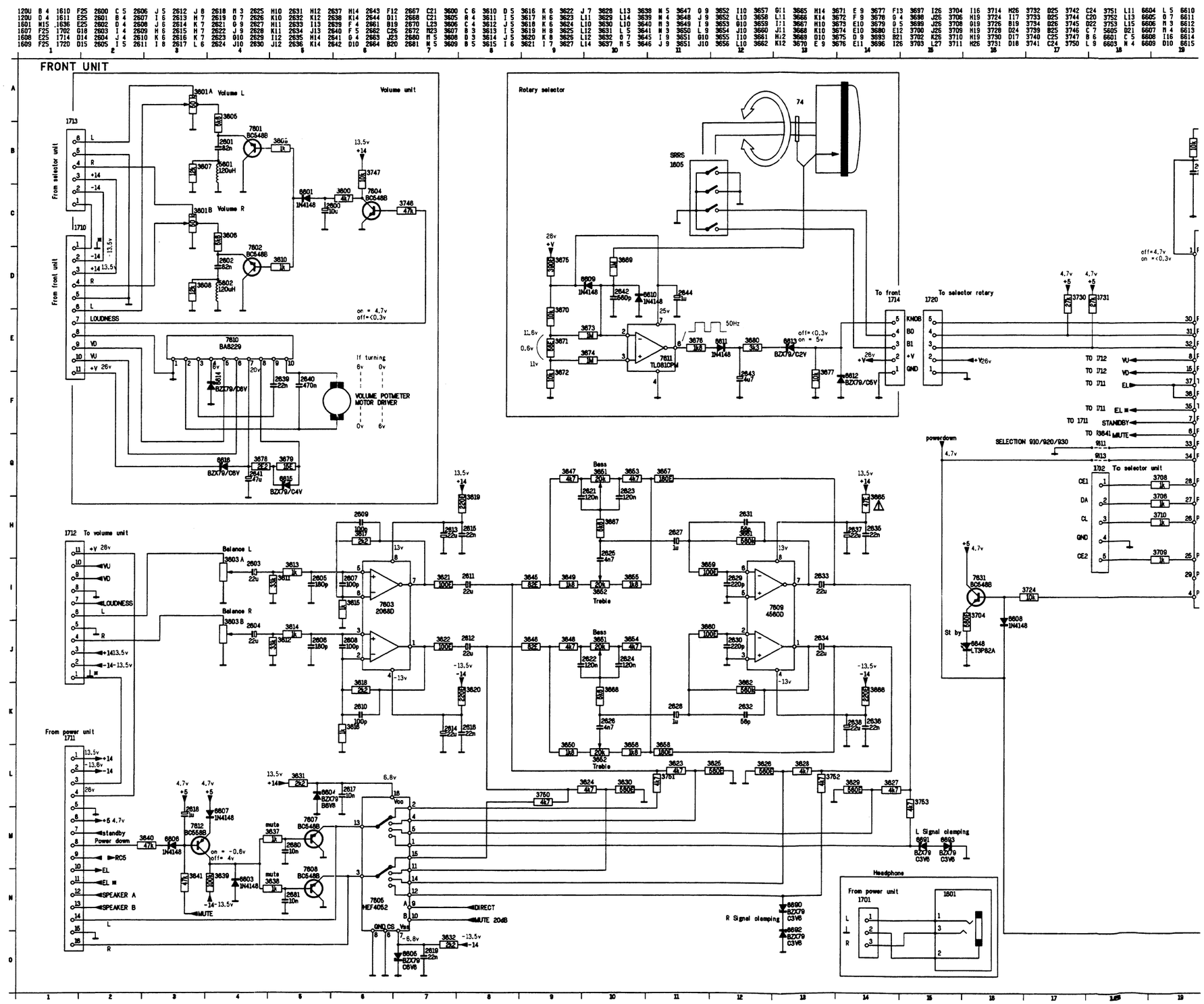

1001
1268
POWER UNIT
1267
1001
S 14
S 13
S 12
S 11
S 10
S 9
S 8
S 7
TRANSFORMER
5001
1 S
2 S
3 S
4 S
5 S
6 S
AC OUTLET UNIT
1003
S
S
MAINS CORD.
= MOLEX CONNECTOR
= DIPMATE
= JST
S = HANDSOLDERING
= WIRE BRIDGES BETWEEN PRINTED BOARDS
1266
L ⊥ R
1265
R ⊥ L SPKR B SPKR A EL * EL RC5 POWER DOWN ST BY +5 ⊥ +V ⊥ * -14 +14
16
8001
1701
1711
16
1004
HEADPHONES
IR EYE
1721
1722
+5
⊥
RC5 SIGNAL
1004
ROTARY SELECTOR
1714
1720
⊥
+V
BI
BO
KNOB
1004
1004
1410
L
⊥
R
+14
-14
⊥
SELECTOR UNIT
CE I
DATA
CLOCK
⊥
STROBE
1411
8002
1702
FRONT UNIT
1712
⊥ *
-14
+14
R
⊥
L
LOUDNESS
⊥
VD = VOL_DOWN
VU = VOL_UP
+V
1270
1269
1001
1713
1004
L
⊥
R
+14
-14
⊥ *
VOLUME UNIT
1710

PCS 57 532

SELECTOR UNIT




3429 100R 1402 DCC OUT L
2429 100p 2471 4n7
3433 100R 1402 TAPE OUT L
2433 100p 2469 4n7
3437 100R 1401 VCR OUT L
2437 100p 2467 4n7
+14 13.5v 3443 270R
3447 3k3
2447 33n 2448 22n 2443 22n 2445 47u
13v
3449 47R
2459 22n 2455 47u
3452 3k3 7405 BC548B
3463 4k7 6401 BZX79C3V6
2457 1n 3451 100R
CE.TUN
LOGIC
CE
DATA
CLOCK
7404 LC4066
3460 47R -13.5v
2456 47u 2460 22n
7402 LC7821
-13.5v 3444 270R
2446 47u 2444 22n
To volume unit
1410
L
R
+14 13.5v
-14 -13.5v
To front unit
1411
CE
DATA
CLOCK
CE.TUN
3438 100R 1401 VCR OUT R
2438 100p
3434 100R 1402 TAPE OUT R
2434 100p
3430 100R 1402 DCC OUT R
2430 100p


FRONT UNIT
Volume unit
Volume L
Volume R
From selector unit
From front unit
LOUDNESS
VOLUME POTMETER MOTOR DRIVER
If turning
Rotary selector
To front 1714
To selector rotary 1720
KNOB
B0
B1
+V
GND
To volume unit 1712
From power unit 1711
Balance L
Balance R
Bass
Treble
Headphone
From power unit 1701
To selector unit 1702
powerdown
SELECTION 910/920/930
STANDBY
MUTE
L Signal clamping
R Signal clamping
St by
mute
MUTE
DIRECT
MUTE 20dB

Volume unit

Volume L

Volume R

on = 4.7v
off=<0.3v

7610 BA6229

If turning
6v 0v
0v 6v

VOLUME POTMETER MOTOR DRIVER

Rotary selector

SRRS 1805

74

To front 1714

KNOB
B0
B1
+V
GND

To selector rotary 1720

+V26v

50Hz

11.6v
0.6v
11v

off=<0.3v
on = 5v

Balance L

Balance R

Bass

Treble

7603 2068D

7809 4560D

7805 HEF4052

mute

DIRECT

MUTE 20dB

L Signal clamping

R Signal clamping

Headphone

From power unit 1701

1801

7850 MC68HC05C

RESET

off=4.7v
on =<0.3v

UCC WPP

IRQ

RC5

OSC1

OSC2

4MHz

PB2
PB1
PB0
PA2
PA1
PA0

1838 DIRECT
1807 ESI
1808 LOUDNESS
1809 B
1810 A
1811 MUTE

IR EYE

6700 SP1U520X

TO 1712 VU
TO 1712 VD
TO 1711 EL
TO 1711 EL ⊞
TO 1711 STANDBY
TO R3641 MUTE

SELECTION 910/920/930

powerdown

1702 To selector unit

CE1
DA
CL
GND
CE2

PD1
PD2
PD3
PA3
PB3
TCMP
PD7
TCAP
PA4
PA5
PD4
PD5
PC0
PC1
PC2
PC3
PD0
PA7

PB4
PB5
PB7
PC6
PC4
PA6
PC7
PC5
PA7

7849 NJW3013

CS
DIN
CLK
DOUT

7847 PC74HCT4094

7848 PC74HCT4094

STR
OE
GND
QS
IN

SPEAKER A TO 1711
SPEAKER B TO 1711
MUTE-20dB TO IC7805
LOUDNESS TO 1712
DIRECT TO IC7805

SPEAKER A
SPEAKER B
MUTE
LOUDNESS
DIRECT
ESI
CD
DCC
TV/VCR
TUNER
PHONO
TAPE

St by

7831 BC548B

7833 BC548B

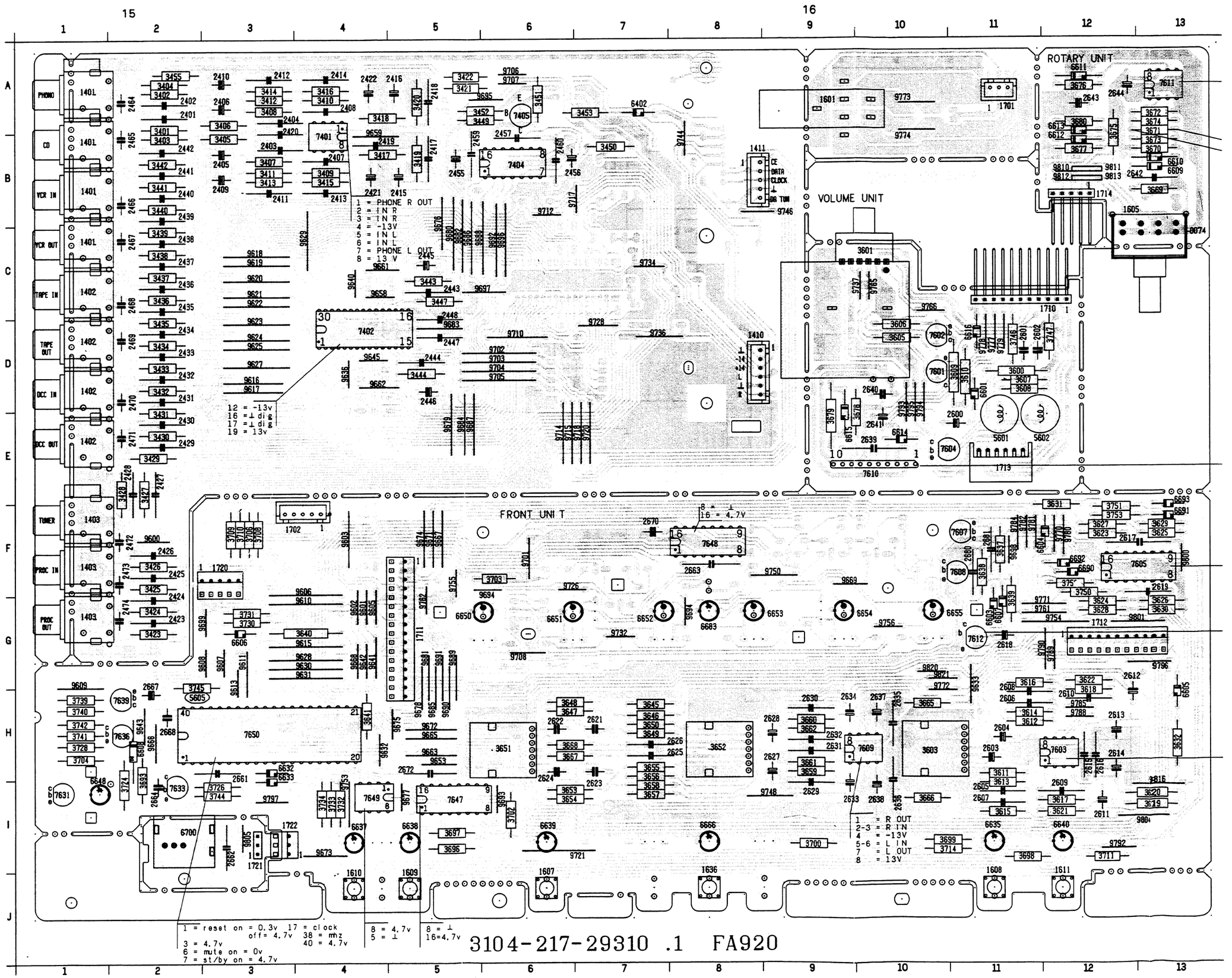
7839 BC558B

7836 BC548B

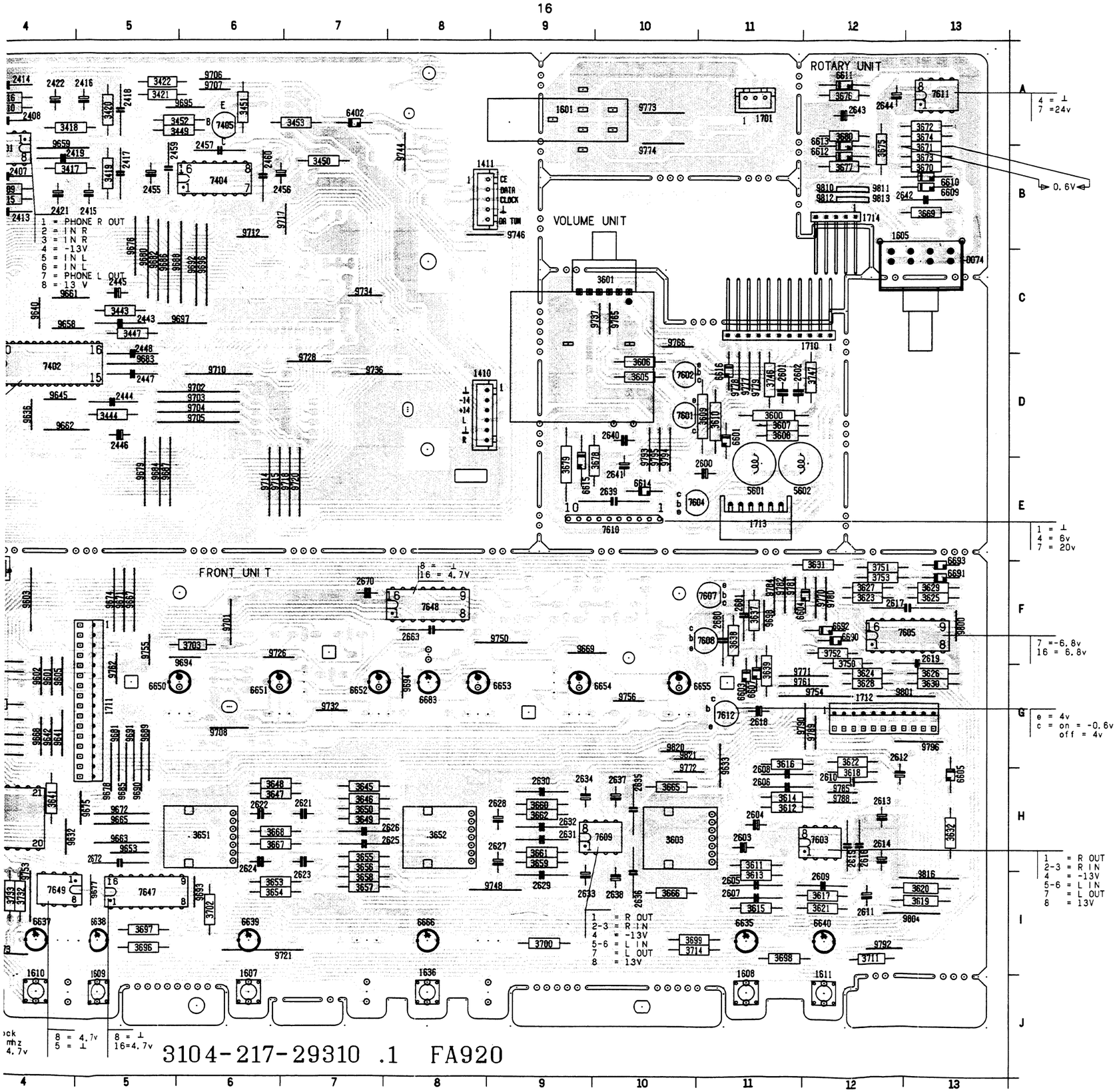
7607 BC548B

7608 BC548B

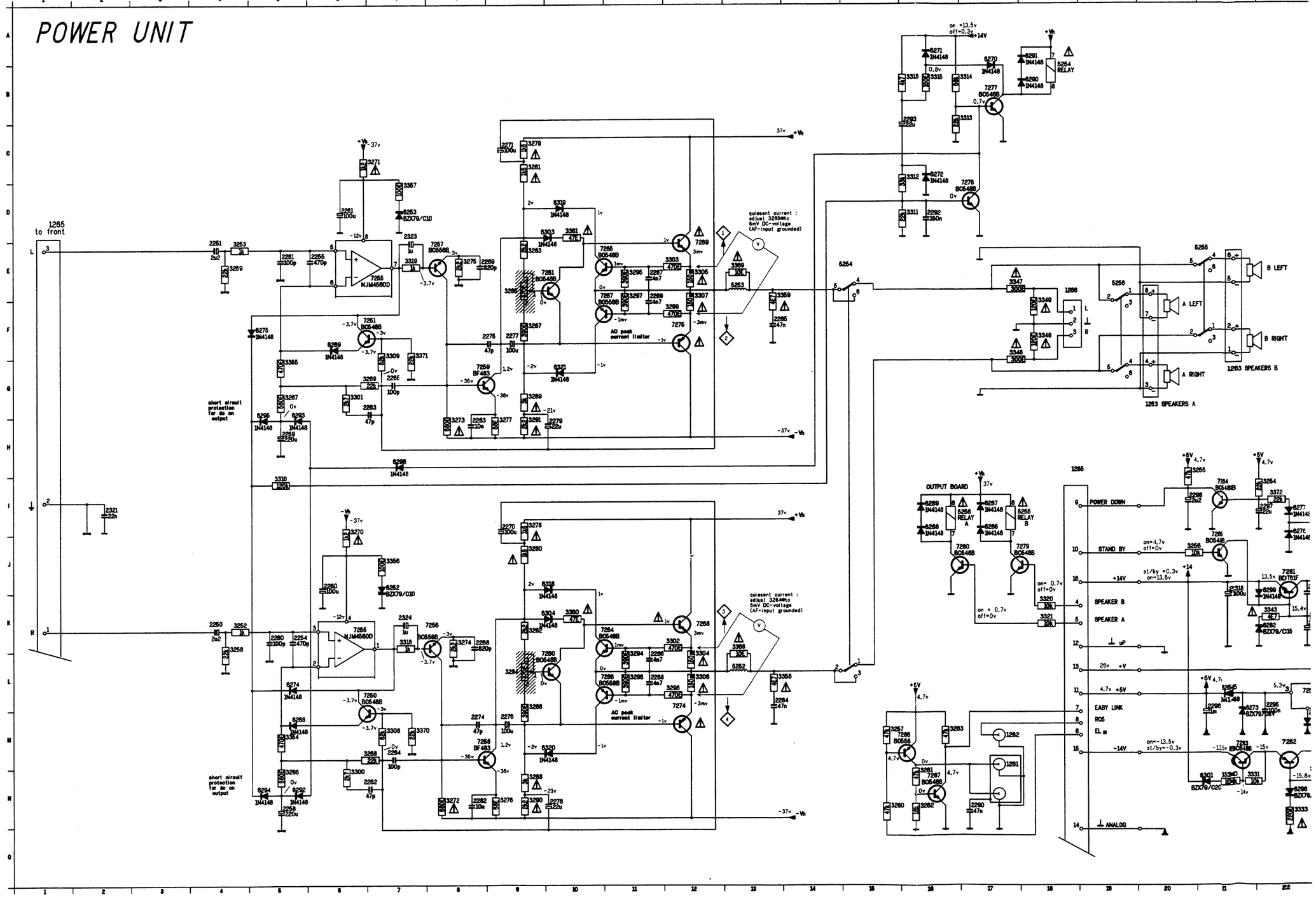
7612 BC558B


ROTARY UNIT
VOLUME UNIT
FRONT UNIT
PHONO
CD
VCR IN
VCR OUT
TAPE IN
TAPE OUT
DCC IN
DCC OUT
TUNER
PROC IN
PROC OUT
1 = PHONE R OUT
2 = I N R
3 = I N R
4 = -13V
5 = I N L
6 = I N L
7 = PHONE L OUT
8 = 13 V
12 = -13v
16 = ⊥ dig
17 = ⊥ dig
19 = 13v
1 = R OUT
2-3 = R IN
4 = -13V
5-6 = L IN
7 = L OUT
8 = 13V
1 = reset on = 0.3v 17 = clock
off = 4.7v 38 = mhz
3 = 4.7v 40 = 4.7v
6 = mute on = 0v
7 = st/by on = 4.7v
8 = 4.7v
5 = ⊥
8 = ⊥
16=4.7v
3104-217-29310 .1 FA920

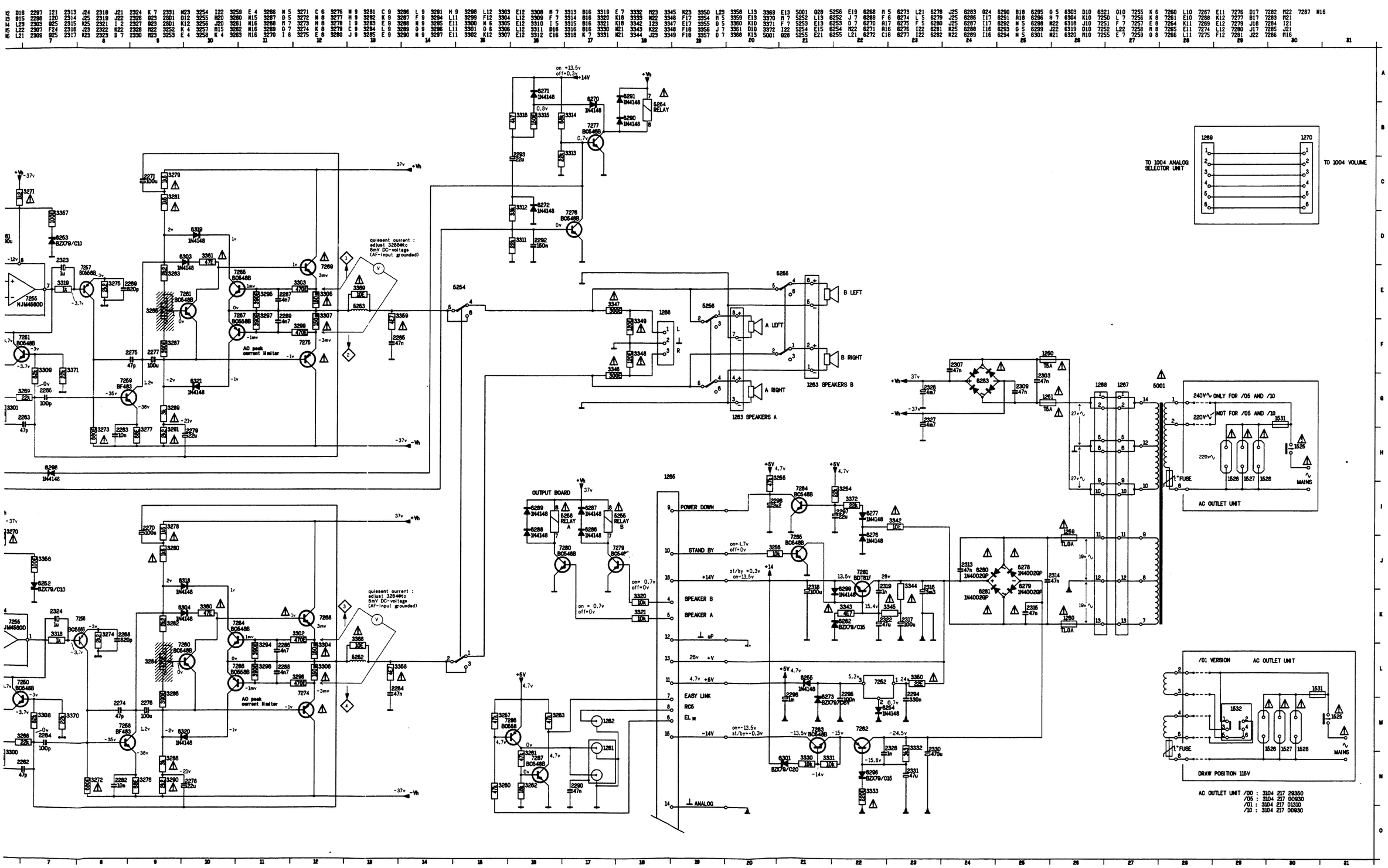
| | | |


ROTARY UNIT
VOLUME UNIT
FRONT UNIT
1 = PHONE R OUT
2 = IN R
3 = IN R
4 = -13V
5 = IN L
6 = IN L
7 = PHONE L OUT
8 = 13 V
CE
DATA
CLOCK
⊥
BR TUN
0.6V
4 = ⊥
7 = 24v
1 = ⊥
4 = 6v
7 = 20v
7 = -6.8v
16 = 6.8v
e = 4v
c = on = -0.6v
off = 4v
1 = R OUT
2-3 = R IN
4 = -13V
5-6 = L IN
7 = L OUT
8 = 13V
8 = ⊥
16 = 4.7v
8 = 4.7v
5 = ⊥
8 = ⊥
16=4.7v
3104-217-29310 .1 FA920

POWER UNIT



PCS 57 536


quiescent current : adjust 3264Ω to 8mV DC-voltage (AF-input grounded)
AC peak current limiter
OUTPUT BOARD
POWER DOWN
STAND BY
SPEAKER B
SPEAKER A
EASY LINK
B LEFT
A LEFT
B RIGHT
A RIGHT
1263 SPEAKERS B
1263 SPEAKERS A
TO 1004 ANALOG SELECTOR UNIT
TO 1004 VOLUME
240V~ ONLY FOR /05 AND /10
220V~ NOT FOR /05 AND /10
1*FUSE
MAINS
AC OUTLET UNIT
/01 VERSION AC OUTLET UNIT
DRAW POSITION 115V
AC OUTLET UNIT /00 : 3104 217 29350
/05 : 3104 217 00930
/01 : 3104 217 01310
/10 : 3104 217 00930

POWER UNIT

RELAYA

RELAYB

RELAY

RC5

EASY LINK

e= ⊥
c=0v
b=0.7v on

e= ⊥
c=0v
b=0.7v on

e=-3.7v
c=-3.7v
b=-3v

e=⊥
c=0v
b=0.7v

e=-3v
c=-35v
b=-3.7v

1=3.7v
4=-12v
7=-3.7v
8=12v

e=-36v
c=1.2v
b=-35v

e=0v
c=1v
b=1mv

e=-3v
c=-35v
b=-3.7v

e=4.7v
c=0v
b=4.7v

e= ⊥
c=4.7v
b=0v

e= ⊥
c=15.4v
b=0v

e=-15v
c=-13.5v
b=-14v

e=-15v
c=-24.5v
b=-15.8v

e=3mv
c=37v
b=1v

e=-1v
c=1v
b=0v

e=0v
c=-1v
b=-1mv

e=-3mv
c=-37v
b=-1v

e=-36v
c=1.2v
b=-35v

e=3mv
c=37v
b=1v

e=0v
c=1v
b=1mv

e=-1v
c=1v
b=0v

e=-3mv
c=-37v
b=-1v

e=0v
c=-1v
b=-1mv

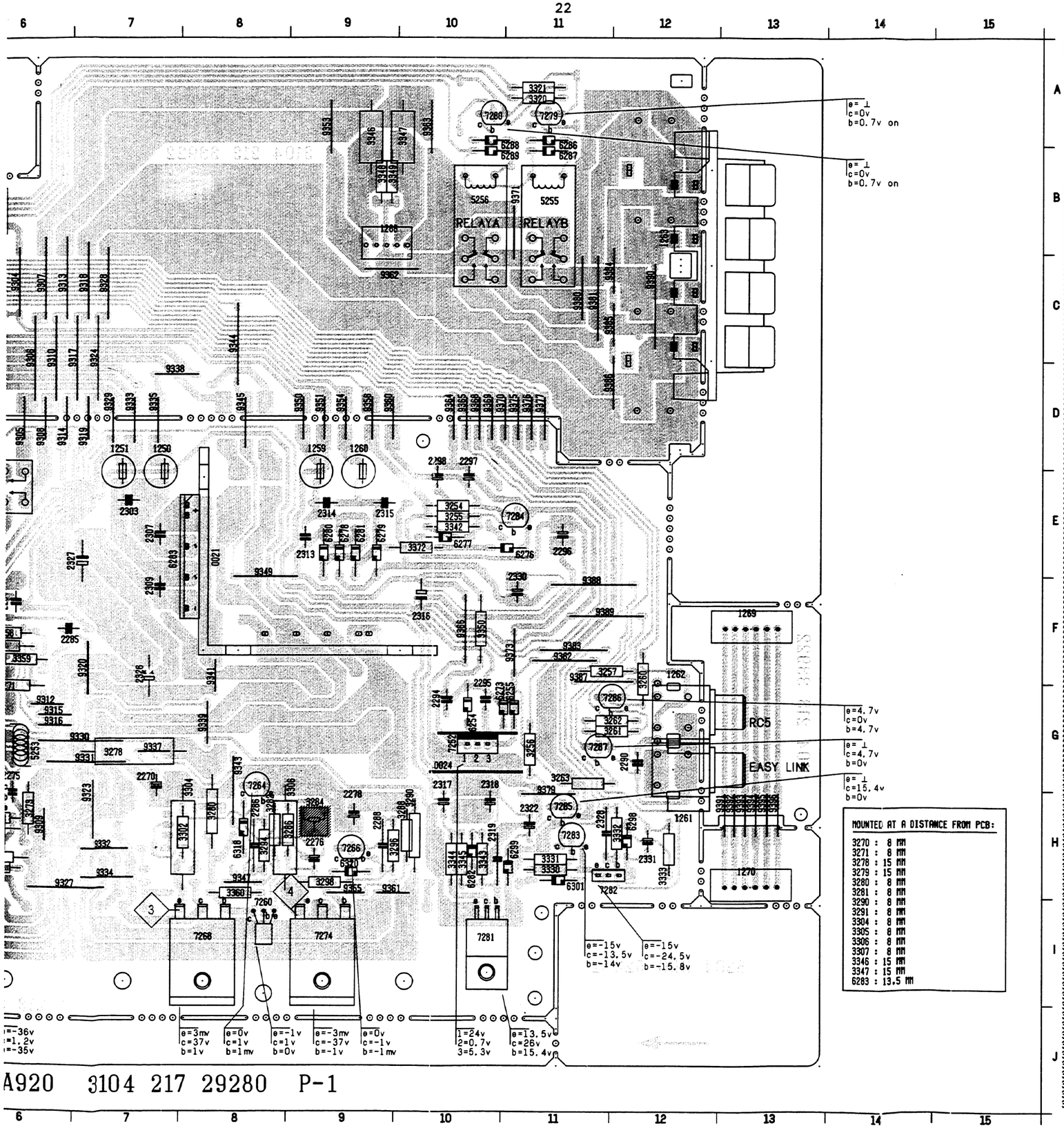
1=24v
2=0.7v
3=5.3v

e=13.5v
c=26v
b=15.4v

MOUNTED AT A DISTANCE FROM PCB:

3270 : 8 mm
3271 : 8 mm
3278 : 15 mm
3279 : 15 mm
3280 : 8 mm
3281 : 8 mm
3290 : 8 mm
3291 : 8 mm
3304 : 8 mm
3305 : 8 mm
3306 : 8 mm
3307 : 8 mm
3346 : 15 mm
3347 : 15 mm
6283 : 13.5 mm

FA920 3104 217 29280 P-1



A920 3104 217 29280 P-1

	0021	E 8	3288	H10	7260	I 8	9355	H 9
	0024	G10	3289	H 6	7261	I 5	9356	D 9
	1250	D 7	3290	H10	7264	G 8	9360	D 9
	1251	D 7	3291	H 6	7265	G 3	9361	H 9
	1259	D 9	3294	H 8	7266	H 9	9362	C 9
A	1260	D 9	3295	G 4	7267	H 5	9363	A10
	1261	H12	3296	H10	7268	I 8	9364	D10
	1262	F12	3297	H 5	7269	I 4	9365	D10
	1263	B12	3298	H 9	7274	I 9	9366	F10
	1265	B 2	3299	H 5	7275	I 5	9368	D10
	1266	B 9	3300	E 4	7276	F 5	9369	D10
	1267	F 2	3301	G 3	7277	E 5	9370	D10
	1268	B 5	3302	H 8	7279	A11	9371	B11
	1269	F13	3303	H 4	7280	A10	9373	F11
	1270	H13	3304	G 8	7281	I10	9375	D11
B	2250	E 3	3305	H 4	7282	H11	9376	D11
	2251	G 3	3306	G 9	7283	H11	9377	D11
	2254	F 4	3307	H 5	7284	E11	9379	H11
	2255	G 3	3308	F 4	7285	H11	9380	C11
	2258	E 3	3309	G 3	7286	G12	9381	C11
	2259	G 3	3310	E 4	7287	G11	9382	F11
	2260	F 5	3311	F 5	9250	G 1	9383	F11
	2261	F 5	3312	F 5	9251	G 1	9384	C11
	2262	E 4	3313	E 4	9252	G 1	9385	C11
	2263	G 3	3314	F 5	9253	G 2	9386	D11
	2264	G 5	3315	E 5	9254	G 2	9387	F11
C	2265	G 5	3316	E 5	9255	G 2	9388	F11
	2268	G 5	3318	F 4	9256	G 2	9389	F11
	2269	G 5	3319	G 4	9257	G 2	9390	C12
	2270	G 7	3320	A11	9258	D 3	9391	H13
	2271	H 4	3321	A11	9259	D 3	9392	H13
	2274	G 5	3330	H11	9260	D 3	9393	H13
	2275	G 6	3331	H11	9261	C 3	9394	H13
	2276	H 9	3332	H12	9262	C 3	9395	H13
	2277	H 5	3333	H12	9263	B 3	9396	H13
	2278	H 9	3342	E10	9264	B 4	9397	G 4
	2279	H 5	3343	H10	9265	B 4	9398	E 3
D	2280	F 3	3344	H10	9267	D 4		
	2281	G 3	3345	H10	9268	B 4		
	2282	G 5	3346	A 9	9269	H 4		
	2283	H 6	3347	A10	9270	D 4		
	2284	F 6	3348	B 9	9271	B 4		
	2285	F 6	3349	B 9	9273	B 4		
	2286	H 8	3350	F10	9274	B 4		
	2287	G 4	3354	F 4	9275	C 4		
	2288	H 9	3355	G 3	9276	C 4		
	2289	H 5	3356	F 5	9277	H 4		
	2290	G12	3357	F 5	9278	C 4		
E	2292	F 5	3358	F 6	9279	G 4		
	2293	E 5	3359	F 6	9280	G 4		
	2294	G10	3360	H 8	9281	C 4		
	2295	G10	3361	I 4	9282	G 4		
	2296	E11	3368	G 5	9283	C 4		
	2297	D10	3369	G 6	9284	G 4		
	2298	D10	3370	E 3	9285	C 5		
	2303	E 7	3371	G 4	9286	H 5		
	2307	E 7	3372	E10	9287	G 5		
	2309	F 7	5252	G 6	9289	C 5		
	2313	E 9	5253	G 6	9290	H 5		
F	2314	E 9	5254	D 6	9291	D 5		
	2315	E 9	5255	B11	9294	C 5		
	2316	F10	5256	B10	9295	F 5		
	2317	G10	6252	G 6	9296	C 5		
	2318	G10	6253	F 5	9297	F 5		
	2319	H10	6254	G10	9298	F 6		
	2321	D 3	6255	G11	9299	C 6		
	2322	H11	6268	F 4	9300	H 6		
	2323	G 4	6269	G 3	9301	F 6		
	2324	F 4	6270	E 5	9304	C 6		
	2326	F 7	6271	F 5	9305	D 6		
G	2327	E 7	6272	E 4	9306	C 6		
	2328	H11	6273	G11	9307	C 6		
	2330	F11	6274	E 4	9308	D 6		
	2331	H12	6275	E 4	9309	H 6		
	3252	F 3	6276	E11	9310	C 6		
	3253	F 3	6277	E10	9312	G 6		
	3254	E10	6278	E 9	9313	C 6		
	3255	E10	6279	E 9	9314	D 6		
	3256	G11	6280	E 9	9315	G 6		
	3257	F11	6281	E 9	9316	G 6		
H	3258	F 3	6282	H10	9317	C 7		
	3259	F 3	6283	E 7	9318	C 7		
	3260	F12	6286	B11	9319	D 7		
	3261	G12	6287	B11	9320	F 7		
	3262	G12	6288	B11	9323	H 7		
	3263	G11	6289	B11	9324	C 7		
	3266	F 3	6290	E 5	9327	H 6		
	3267	G 3	6291	E 5	9328	C 7		
	3268	E 4	6292	E 3	9329	D 7		
	3269	G 3	6293	E 3	9330	G 7		
	3270	F 6	6294	E 3	9331	G 7		
I	3271	G 6	6295	E 3	9332	H 7		
	3272	G 5	6296	E 3	9333	D 7		
	3273	H 6	6298	H12	9334	H 7		
	3274	F 5	6299	H11	9335	D 7		
	3275	G 5	6301	H11	9337	G 7		
	3276	G 5	6318	H 8	9338	D 7		
	3277	H 6	6319	H 4	9339	G 8		
	3278	G 7	6320	H 9	9341	F 8		
	3279	H 3	6321	H 5	9343	G 8		
	3280	H 8	7250	F 4	9344	C 8		
	3281	H 4	7251	G 3	9345	D 8		
J	3282	H 8	7252	G10	9347	H 8		
	3283	H 4	7255	F 4	9349	E 8		
	3284	H 9	7256	F 4	9350	D 9		
	3285	H 4	7257	G 4	9351	D 9		
	3286	H 9	7258	G 5	9353	A 9		
	3287	H 5	7259	H 6	9354	D 9		

MECHANICAL PARTS

401	4822 410 61716	KNOB SOURCE SEL.ASSY
403	4822 426 51525	FRONT ASSY
404	4822 413 41696	KNOB
405	4822 450 61831	IR-WINDOW
406	4822 410 61717	KNOB VOLUME
407	4822 426 60621	STRIP
408	4822 459 20579	PLATE ORNAMENTAL
409	4822 278 10124	BUTTON ASSY
410	4822 380 20425	LED REFLECTOR
412	4822 255 41247	SOCKET LED
416	4822 255 30217	LEDHOLDER
417	4822 267 31453	HEADPHONE SOCKET
418	4822 380 20424	REFLECTOR
419	4822 273 10237	ROTORY SWITCH
421	4822 404 21194	POWER ROD
422	4822 462 71808	POWER CAP
425	4822 130 81254	IR EYE
426	4822 276 13231	POWER SWITCH
427	4822 145 40189	MAINS TRAFO
428	4822 462 41888	FOOT
429	4822 462 41887	FOOT VILT
431	4822 101 21175	VOLUME ASSY
432	4822 532 60948	BUSHING
433	4822 265 20544	MAINS OUTPUT
433	4822 265 20554	MAINS OUTPUT ONLY /05
434	4822 321 61478	CINCH CORD
435	4822 321 10789	MAINS CORD
436	4822 268 90449	JUMPER PLUG
437	4822 404 21195	TRANSISTOR BRACKET
438	4822 502 13921	PHONE GND SREW
	4822 218 10439	REMOTE CONTROL(RH6640/01)

NOTE'S

25, 26 leer

MISCELLANEOUS

1250	4822 071 55002	Fuse 5A
1251	4822 071 55002	Fuse 5A
1259	4822 071 51002	Fuse 1A
1260	4822 071 51002	Fuse 1A
1531	4822 071 51002	Fuse 1A
1261	4822 265 20542	Pin jack
1262	4822 265 20543	Pin jack
1401	4822 267 31451	Pin jack
1402	4822 267 31451	Pin jack
1403	4822 267 31449	Pin jack
1525	4822 276 13231	Power switch
1526	4822 265 20544	Mains Socket
1527	4822 265 20544	Mains Socket
1528	4822 265 20544	Mains Socket
1601	4822 267 31453	Headphone socket
1605	4822 273 10237	Rotory switch
1607	4822 276 13213	Tact switch
1608	4822 276 13213	Tact switch
1609	4822 276 13213	Tact switch
1610	4822 276 13213	Tact switch
1611	4822 276 13213	Tact switch
1636	4822 276 13213	Tact switch
	4822 736 21321	IFU FA920
	4822 218 10439	Remote control (RH6640/01)

CAPACITORS

2250	4822 124 40244	2,2µF 20% 63V
2251	4822 124 40244	2,2µF 20% 63V
2254	4822 122 31435	470pF 10% 50V
2255	4822 122 31435	470pF 10% 50V
2258	4822 124 41554	220µF 20% 10V
2259	4822 124 41554	220µF 20% 10V
2260	4822 124 41643	100µF 20% 16V
2261	4822 124 41643	100µF 20% 16V
2262	4822 122 10181	47pF 5% 50V
2263	4822 122 10181	47pF 5% 50V
2264	4822 122 33308	100pF 10% 500V
2265	4822 122 33308	100pF 10% 500V
2268	4822 122 10173	820pF 10% 50V
2269	4822 122 10173	820pF 10% 50V
2270	4822 124 40255	100µF 50% 63V
2271	4822 124 40255	100µF 50% 63V
2274	4822 126 12017	47pF NPO 500V
2275	4822 126 12017	47pF NPO 500V
2276	4822 124 40178	100µF 20% 10V
2277	4822 124 40178	100µF 20% 10V
2278	4822 124 41596	22µF 20% 50V
2279	4822 124 41596	22µF 20% 50V
2280	4822 122 10183	100pF 5% 50V
2281	4822 122 10183	100pF 5% 50V
2282	4822 122 10177	10nF 20% 25V
2283	4822 122 10177	10nF 20% 25V
2284	4822 121 41984	47nF 10% 400V
2285	4822 121 41984	47nF 10% 400V
2286	4822 126 11311	4,7nF 50V
2287	4822 126 11311	4,7nF 50V
2288	4822 126 11311	4,7nF 50V
2289	4822 126 11311	4,7nF 50V
2290	5322 121 42491	47nF 5% 100V
2292	4822 121 41854	150nF 5% 63V
2293	4822 124 41678	22µF 20% 25V
2294	5322 121 42661	330nF 5% 63V
2295	5322 121 42386	100nF 5% 63V
2296	4822 124 40201	1000µF 20% 16V
2297	4822 124 41678	22µF 20% 25V
2298	4822 124 40244	2,2µF 20% 63V
2303	4822 121 43875	47nF 5% 250V
2307	4822 121 43875	47nF 5% 250V
2309	4822 121 43875	47nF 5% 250V
2313	4822 121 41984	47nF 10% 400V
2314	4822 121 41984	47nF 10% 400V
2315	4822 121 41984	47nF 10% 400V
2316	4822 124 42367	3300µF 20% 35V
2317	5322 124 21189	100µF 20% 40V
2318	5322 124 21189	100µF 20% 40V
2319	4822 122 10158	1nF 10% 50V
2321	4822 122 10166	22nF 30% 16V
2322	4822 124 40433	47µF 20% 25V
2323	4822 124 40242	1µF 20% 63V
2324	4822 124 40242	1µF 20% 63V
2326	4822 124 42117	4700µF 20% 50V
2327	4822 124 42117	4700µF 20% 50V
2328	4822 122 10158	1nF 10% 50V
2330	4822 124 41334	470µF 20% 35V
2331	4822 124 40433	47µF 20% 25V
2401	4822 122 10183	100pF 5% 50V
2402	4822 122 10183	100pF 5% 50V
2403	4822 122 10183	100pF 5% 50V
2404	4822 122 10183	100pF 5% 50V
2405	4822 124 40242	1µF 20% 63V
2406	4822 124 40242	1µF 20% 63V
2407	4822 122 10158	1nF 10% 50V
2408	4822 122 10158	1nF 10% 50V
2409	4822 124 21212	15µF 20% 40V
2410	4822 124 21212	15µF 20% 40V
2411	4822 122 10177	10nF 20% 25V
2412	4822 122 10177	10nF 20% 25V
2413	4822 126 11309	2,7nF 10%Y5F 50V
2414	4822 126 11309	2,7nF 10%Y5F 50V

2415	4822 124 40435	10µF 20% 50V
2416	4822 124 40435	10µF 20% 50V
2417	4822 122 10183	100pF 5% 50V
2418	4822 122 10183	100pF 5% 50V
2419	4822 122 10166	22nF 30% 16V
2420	4822 122 10166	22nF 30% 16V
2421	4822 124 40433	47µF 20% 25V
2422	4822 124 40433	47µF 20% 25V
2423	4822 122 10183	100pF 5% 50V
2424	4822 122 10183	100pF 5% 50V
2425	4822 122 10183	100pF 5% 50V
2426	4822 122 10183	100pF 5% 50V
2427	4822 122 10183	100pF 5% 50V
2428	4822 122 10183	100pF 5% 50V
2429	4822 122 10183	100pF 5% 50V
2430	4822 122 10183	100pF 5% 50V
2431	4822 122 10183	100pF 5% 50V
2432	4822 122 10183	100pF 5% 50V
2433	4822 122 10183	100pF 5% 50V
2434	4822 122 10183	100pF 5% 50V
2435	4822 122 10183	100pF 5% 50V
2436	4822 122 10183	100pF 5% 50V
2437	4822 122 10183	100pF 5% 50V
2438	4822 122 10183	100pF 5% 50V
2439	4822 122 10183	100pF 5% 50V
2440	4822 122 10183	100pF 5% 50V
2441	4822 122 10183	100pF 5% 50V
2442	4822 122 10183	100pF 5% 50V
2443	4822 122 10166	22nF 30% 16V
2444	4822 122 10166	22nF 30% 16V
2446	4822 124 40433	47µF 20% 25V
2447	4822 126 10003	33nF 30% 50V
2448	4822 122 10166	22nF 30% 16V
2455	4822 124 40433	47µF 20% 25V
2456	4822 124 40433	47µF 20% 25V
2457	4822 122 10158	1nF 10% 50V
2459	4822 122 10166	22nF 30% 16V
2460	4822 122 10166	22nF 30% 16V
2464	4822 126 11005	4,7nF 20% 50V
2465	4822 126 11005	4,7nF 20% 50V
2466	4822 126 11005	4,7nF 20% 50V
2467	4822 126 11005	4,7nF 20% 50V
2468	4822 126 11005	4,7nF 20% 50V
2469	4822 126 11005	4,7nF 20% 50V
2470	4822 126 11005	4,7nF 20% 50V
2471	4822 126 11005	4,7nF 20% 50V
2472	4822 126 11005	4,7nF 20% 50V
2473	4822 126 11005	4,7nF 20% 50V
2474	4822 126 11005	4,7nF 20% 50V
2600	4822 124 40435	10µF 20% 50V
2601	4822 121 41754	82nF 10% 100V
2602	4822 121 41754	82nF 10% 100V
2603	4822 124 23176	22µF 20% 16V
2604	4822 124 23176	22µF 20% 16V
2605	4822 122 10171	180pF 10% 50V
2606	4822 122 10171	180pF 10% 50V
2607	4822 122 10183	100pF 5% 50V
2608	4822 122 10183	100pF 5% 50V
2609	4822 122 10183	100pF 5% 50V
2610	4822 122 10183	100pF 5% 50V
2611	4822 124 23179	10µF 20% 16V
2612	4822 124 23179	10µF 20% 16V
2613	4822 124 42368	22µF 35V
2614	4822 124 42368	22µF 35V
2615	4822 122 10166	22nF 30% 16V
2616	4822 122 10166	22nF 30% 16V
2617	4822 122 10177	10nF 20% 25V
2618	4822 124 40242	1µF 20% 63V
2619	4822 122 10177	10nF 20% 25V
2621	4822 121 51409	120nF 5% 63V
2622	4822 121 51409	120nF 5% 63V
2623	4822 121 51409	120nF 5% 63V
2624	4822 121 51409	120nF 5% 63V
2625	4822 126 11311	4,7nF 50V
2626	4822 126 11311	4,7nF 50V
2627	4822 124 41969	1µF 20% 50V
2628	4822 124 41969	1µF 20% 50V
2629	4822 122 10183	100pF 5% 50V
2630	4822 122 10183	100pF 5% 50V
2631	4822 122 33997	56pF 5%NPO
2632	4822 122 33997	56pF 5%NPO
2633	4822 124 23176	22µF 20% 16V
2634	4822 124 23176	22µF 20% 16V
2635	4822 122 10166	22nF 30% 16V
2636	4822 122 10166	22nF 30% 16V
2637	4822 124 42368	22µF 35V
2638	4822 124 42368	22µF 35V
2639	4822 126 12018	22nF 30% 16V
2640	4822 121 51245	220nF 63V
2641	4822 124 22347	47µF 50V
2642	4822 122 31693	560pF 10% 50V
2644	4822 124 40242	1µF 20% 63V
2661	4822 122 10166	22nF 30% 16V
2662	4822 122 10166	22nF 30% 16V
2663	4822 122 10158	1nF 10% 50V
2664	4822 121 51245	220nF 63V
2667	4822 124 23176	22µF 20% 16V
2668	4822 121 43041	560nF 10% 63V
2670	4822 121 41545	0,033µF 10% 250V
2672	4822 122 10177	10nF 20% 25V
2680	4822 122 10177	10nF 20% 25V
2681	4822 122 10177	10nF 20% 25V

RESISTORS

3252	4822 050 21002	1k 1% 0,6W
3253	4822 050 21002	1k 1% 0,6W
3254	4822 050 22203	22k 1% 0,6W
3255	4822 050 24703	47k 1% 0,6W
3256	4822 050 21003	10k 1% 0,6W
3257	4822 050 24703	47k 1% 0,6W
3258	4822 050 22203	22k 1% 0,6W
3259	4822 050 22203	22k 1% 0,6W
3260	4822 050 24703	47k 1% 0,6W
3261	4822 050 24703	47k 1% 0,6W
3262	4822 050 21803	18k 1% 0,6W
3263	4822 050 24703	47k 1% 0,6W
3266	4822 051 10561	560Ω 2% 0,25W
3267	4822 051 10561	560Ω 2% 0,25W
3268	4822 050 22203	22k 1% 0,6W
3269	4822 050 22203	22k 1% 0,6W
3270	4822 053 10122	1k2 5% 1W
3271	4822 053 10122	1k2 5% 1W
3272	4822 052 10681	680Ω 5% 0,33W
3273	4822 052 10681	680Ω 5% 0,33W
3274	4822 050 22202	2k2 1% 0,6W
3275	4822 050 22202	2k2 1% 0,6W
3276	4822 050 16809	68Ω 1% 0,4W
3277	4822 050 16809	68Ω 1% 0,4W
3278	4822 053 12152	1k5 5% 3W
3279	4822 053 12152	1k5 5% 3W
3280	4822 053 10152	1k5 5% 1W
3281	4822 053 10152	1k5 5% 1W
3282	4822 050 22202	2k2 1% 0,6W
3283	4822 050 22202	2k2 1% 0,6W
3284	4822 101 10927	470Ω
3285	4822 101 10927	470Ω
3286	4822 050 23901	390Ω 1% 0,6W
3287	4822 050 23901	390Ω 1% 0,6W
3288	4822 050 23002	3k 1% 0,6W
3289	4822 050 23002	3k 1% 0,6W
3290	4822 053 10222	2k2 5% 1W
3291	4822 053 10222	2k2 5% 1W
3294	4822 050 23901	390Ω 1% 0,6W
3295	4822 050 23901	390Ω 1% 0,6W
3296	4822 050 23901	390Ω 1% 0,6W
3297	4822 050 23901	390Ω 1% 0,6W
3298	4822 116 52224	470Ω 5% 0,5W
3299	4822 116 52224	470Ω 5% 0,5W
3300	4822 116 52263	2k7 5% 0,5W
3301	4822 116 52263	2k7 5% 0,5W
3302	4822 116 52224	470Ω 5% 0,5W
3303	4822 116 52224	470Ω 5% 0,5W
3304	4822 113 80525	OR15 10% 3W
3305	4822 113 80525	OR15 10% 3W
3306	4822 113 80525	OR15 10% 3W
3307	4822 113 80525	OR15 10% 3W
3308	4822 050 28203	82k 1% 0,6W
3309	4822 050 28203	82k 1% 0,6W
3310	4822 050 21204	120k 1% 0,6W
3311	4822 050 22203	22k 1% 0,6W
3312	4822 050 13303	33k 1% 0,4W
3313	4822 050 22203	22k 1% 0,6W
3314	4822 050 26803	68k 1% 0,6W
3315	4822 050 21501	150Ω 1% 0,6W
3316	4822 050 24702	4k7 1% 0,6W
3318	4822 050 21002	1k 1% 0,6W
3319	4822 050 21002	1k 1% 0,6W
3320	4822 050 21003	10k 1% 0,6W
3321	4822 050 21003	10k 1% 0,6W
3330	4822 050 21003	10k 1% 0,6W
3331	4822 050 21003	10k 1% 0,6W
3332	4822 050 23302	3k3 1% 0,6W
3333	4822 116 80564	220Ω 5%
3342	4822 116 80562	10Ω 5%
3343	4822 116 80311	4Ω7 5%
3344	4822 050 21802	1k8 1% 0,6W
3345	4822 050 21202	1k2 1% 0,6W
3346	4822 053 11331	330Ω 5% 2W
3347	4822 053 11331	330Ω 5% 2W
3348	4822 050 21201	120Ω 1% 0,6W
3349	4822 050 21201	120Ω 1% 0,6W
3350	4822 052 10229	22Ω 5% 0,33W
3354	4822 116 52224	470Ω 5% 0,5W
3355	4822 116 52224	470Ω 5% 0,5W
3356	4822 051 10101	100Ω 2% 0,25W
3357	4822 051 10101	100Ω 2% 0,25W
3358	4822 116 80311	4Ω7 5%
3359	4822 116 80311	4Ω7 5%
3360	4822 116 80335	47Ω
3361	4822 116 80335	47Ω
3368	4822 116 80562	10Ω 5%
3369	4822 116 80562	10Ω 5%
3370	4822 050 22203	22k 1% 0,6W
3371	4822 050 22203	22k 1% 0,6W
3372	4822 050 22203	22k 1% 0,6W
3401	4822 050 23901	390Ω 1% 0,6W
3402	4822 050 23901	390Ω 1% 0,6W
3403	4822 116 52272	330k 5% 0,5W
3404	4822 116 52272	330k 5% 0,5W
3405	4822 050 25603	56k 1% 0,6W
3406	4822 050 25603	56k 1% 0,6W
3407	4822 050 23901	390Ω 1% 0,6W
3408	4822 050 23901	390Ω 1% 0,6W
3409	4822 051 10101	100Ω 2% 0,25W
3410	4822 051 10101	100Ω 2% 0,25W
3411	4822 051 10561	560Ω 2% 0,25W
3412	4822 051 10561	560Ω 2% 0,25W

3413	4822 116 52272	330k 5% 0,5W
3414	4822 116 52272	330k 5% 0,5W
3415	4822 116 52264	27k 5% 0,5W
3416	4822 116 52264	27k 5% 0,5W
3417	4822 051 10101	100Ω 2% 0,25W
3418	4822 051 10101	100Ω 2% 0,25W
3419	4822 116 52234	100k 5% 0,5W
3420	4822 116 52234	100k 5% 0,5W
3421	4822 050 22201	220Ω 1% 0,6W
3422	4822 050 22201	220Ω 1% 0,6W
3423	4822 051 10101	100Ω 2% 0,25W
3424	4822 051 10101	100Ω 2% 0,25W
3425	4822 051 10101	100Ω 2% 0,25W
3426	4822 051 10101	100Ω 2% 0,25W
3427	4822 051 10101	100Ω 2% 0,25W
3428	4822 051 10101	100Ω 2% 0,25W
3429	4822 051 10101	100Ω 2% 0,25W
3430	4822 051 10101	100Ω 2% 0,25W
3431	4822 051 10101	100Ω 2% 0,25W
3432	4822 051 10101	100Ω 2% 0,25W
3433	4822 051 10101	100Ω 2% 0,25W
3434	4822 051 10101	100Ω 2% 0,25W
3435	4822 051 10101	100Ω 2% 0,25W
3436	4822 051 10101	100Ω 2% 0,25W
3437	4822 051 10101	100Ω 2% 0,25W
3438	4822 051 10101	100Ω 2% 0,25W
3439	4822 051 10101	100Ω 2% 0,25W
3440	4822 051 10101	100Ω 2% 0,25W
3441	4822 051 10101	100Ω 2% 0,25W
3442	4822 051 10101	100Ω 2% 0,25W
3443	4822 116 52217	270Ω 5% 0,5W
3444	4822 116 52217	270Ω 5% 0,5W
3447	4822 050 23302	3k3 1% 0,6W
3449	4822 116 52217	270Ω 5% 0,5W
3450	4822 116 52217	270Ω 5% 0,5W
3451	4822 116 52234	100k 5% 0,5W
3452	4822 050 24702	4k7 1% 0,6W
3453	4822 050 24702	4k7 1% 0,6W
3455	4822 050 28209	82Ω 1% 0,6W
3600	4822 050 24702	4k7 1% 0,6W
3601	4822 101 21175	50k
3603	4822 101 21176	100k
3605	4822 050 15602	5k6 1% 0,4W
3606	4822 050 15602	5k6 1% 0,4W
3607	4822 050 21203	12k 1% 0,6W
3608	4822 050 21203	12k 1% 0,6W
3609	4822 050 21002	1k 1% 0,6W
3610	4822 050 21002	1k 1% 0,6W
3611	4822 050 13303	33k 1% 0,4W
3612	4822 050 13303	33k 1% 0,4W
3613	4822 050 21002	1k 1% 0,6W
3614	4822 050 21002	1k 1% 0,6W
3615	4822 050 21002	1k 1% 0,6W
3616	4822 050 21002	1k 1% 0,6W
3617	4822 050 22202	2k2 1% 0,6W
3618	4822 050 22202	2k2 1% 0,6W
3619	4822 116 80335	47Ω
3620	4822 050 22201	220Ω 1% 0,6W
3621	4822 051 10101	100Ω 2% 0,25W
3622	4822 051 10101	100Ω 2% 0,25W
3623	4822 050 24702	4k7 1% 0,6W
3624	4822 050 24702	4k7 1% 0,6W
3625	4822 051 10561	560Ω 2% 0,25W
3626	4822 051 10561	560Ω 2% 0,25W
3627	4822 050 24702	4k7 1% 0,6W
3628	4822 050 24702	4k7 1% 0,6W
3629	4822 051 10561	560Ω 2% 0,25W
3630	4822 051 10561	560Ω 2% 0,25W
3631	4822 050 22202	2k2 1% 0,6W
3632	4822 050 22202	2k2 1% 0,6W
3637	4822 050 21002	1k 1% 0,6W
3638	4822 050 21002	1k 1% 0,6W
3639	4822 116 52234	100k 5% 0,5W
3640	4822 050 24703	47k 1% 0,6W
3641	4822 050 24703	47k 1% 0,6W
3645	4822 050 28209	82Ω 1% 0,6W
3646	4822 050 28209	82Ω 1% 0,6W
3647	4822 050 24702	4k7 1% 0,6W
3648	4822 050 24702	4k7 1% 0,6W
3649	4822 051 10182	1k8 2% 0,25W
3650	4822 051 10182	1k8 2% 0,25W
3651	4822 101 21177	20k
3652	4822 101 21177	20k
3653	4822 050 24702	4k7 1% 0,6W
3654	4822 050 24702	4k7 1% 0,6W
3655	4822 051 10182	1k8 2% 0,25W
3656	4822 051 10182	1k8 2% 0,25W
3657	4822 050 21801	180Ω 1% 0,6W
3658	4822 050 21801	180Ω 1% 0,6W
3659	4822 051 10101	100Ω 2% 0,25W
3660	4822 051 10101	100Ω 2% 0,25W
3661	4822 050 25604	560k 1% 0,6W
3662	4822 050 25604	560k 1% 0,6W
3665	4822 116 80335	47Ω
3666	4822 050 22201	220Ω 1%
3667	4822 050 15602	5k6 1% 0,4W
3668	4822 050 15602	5k6 1% 0,4W
3669	4822 050 21005	1M 1% 0,6W
3670	4822 050 21003	10k 1% 0,6W
3671	4822 116 52197	56Ω 5% 0,5W
3672	4822 050 21003	10k 1% 0,6W
3673	4822 050 21005	1M 1% 0,6W
3674	4822 050 21005	1M 1% 0,6W
3675	4822 050 23901	390Ω 1% 0,6W
3676	4822 051 10182	1k8 2% 0,25W
3677	4822 050 21003	10k 1% 0,6W

3678	4822 116 82366	2Ω2
3679	4822 053 11159	15Ω 5% 2W
3680	4822 050 23302	3k3 1% 0,6W
3693	4822 116 80311	4Ω7 5%
3696	4822 051 10561	560Ω 2% 0,25W
3697	4822 051 10561	560Ω 2% 0,25W
3698	4822 051 10561	560Ω 2% 0,25W
3699	4822 051 10561	560Ω 2% 0,25W
3700	4822 051 10561	560Ω 2% 0,25W
3702	4822 051 10561	560Ω 2% 0,25W
3703	4822 051 10561	560Ω 2% 0,25W
3704	4822 051 10561	560Ω 2% 0,25W
3706	4822 050 21002	1k 1% 0,6W
3708	4822 050 21002	1k 1% 0,6W
3709	4822 050 21002	1k 1% 0,6W
3710	4822 050 21002	1k 1% 0,6W
3711	4822 050 21002	1k 1% 0,6W
3714	4822 050 21002	1k 1% 0,6W
3724	4822 050 21003	10k 1% 0,6W
3726	4822 050 21003	10k 1% 0,6W
3728	4822 050 21803	18k 1% 0,6W
3730	4822 116 52264	27k 5% 0,5W
3731	4822 116 52264	27k 5% 0,5W
3732	4822 116 52264	27k 5% 0,5W
3733	4822 116 52264	27k 5% 0,5W
3734	4822 116 52264	27k 5% 0,5W
3739	4822 050 24703	47k 1% 0,6W
3740	4822 050 24703	47k 1% 0,6W
3741	4822 050 24703	47k 1% 0,6W
3742	4822 050 24703	47k 1% 0,6W
3744	4822 050 22203	22k 1% 0,6W
3745	4822 116 52235	1M 5% 0,5W
3746	4822 050 24703	47k 1% 0,6W
3747	4822 050 21003	10k 1% 0,6W
3750	4822 050 24702	4k7 1% 0,6W
3751	4822 050 24702	4k7 1% 0,6W
3752	4822 050 24702	4k7 1% 0,6W
3753	4822 050 24702	4k7 1% 0,6W

COILS

5001	4822 145 40189	MAINS TRAFO
5252	4822 157 62255	COIL
5253	4822 157 62255	COIL
5254	4822 280 70368	RELAY
5255	4822 280 70368	RELAY
5256	4822 280 70368	RELAY
5601	4822 101 21178	COIL 120MH
5602	4822 101 21178	COIL 120MH
5605	4822 242 72527	RESONATOR 4MHz

DIODES

6252	4822 130 61219	BZX79-C10
6253	4822 130 61219	BZX79-C10
6255	4822 130 30621	1N4148
6268	4822 130 30621	1N4148
6269	4822 130 30621	1N4148
6270	4822 130 30621	1N4148
6271	4822 130 30621	1N4148
6272	4822 130 30621	1N4148
6273	4822 130 34278	BZX79-C6V8
6274	4822 130 30621	1N4148
6275	4822 130 30621	1N4148
6276	4822 130 30621	1N4148
6277	4822 130 30621	1N4148
6278	5322 130 30684	1N4002GP
6279	5322 130 30684	1N4002GP
6280	5322 130 30684	1N4002GP
6281	5322 130 30684	1N4002GP
6282	4822 130 34281	BZX79-C15
6283	4822 130 82078	D5SBA20
6286	4822 130 30621	1N4148
6287	4822 130 30621	1N4148
6288	4822 130 30621	1N4148
6289	4822 130 30621	1N4148
6290	4822 130 30621	1N4148
6291	4822 130 30621	1N4148
6292	4822 130 30621	1N4148
6293	4822 130 30621	1N4148
6294	4822 130 30621	1N4148
6295	4822 130 30621	1N4148
6296	4822 130 30621	1N4148
6298	4822 130 34281	BZX79-C15
6299	4822 130 30621	1N4148
6301	4822 130 34499	BZX79-C20
6303	4822 130 30621	1N4148
6304	4822 130 30621	1N4148
6318	4822 130 30621	1N4148
6319	4822 130 30621	1N4148
6320	4822 130 30621	1N4148
6321	4822 130 30621	1N4148
6402	4822 130 34268	BZX79-C16
6601	4822 130 30621	1N4148
6603	4822 130 30621	1N4148
6604	4822 130 34278	BZX79-C6V8
6605	4822 130 34278	BZX79-C6V8
6606	4822 130 30621	1N4148
6607	4822 130 30621	1N4148
6608	4822 130 30621	1N4148
6609	4822 130 30621	1N4148
6610	4822 130 30621	1N4148
6611	4822 130 30621	1N4148

6612	4822 130 34233	BZX79-C5V1
6613	4822 130 31253	BZX79-C2V4
6614	4822 130 34167	BZX79-C6V2
6615	4822 130 34174	BZX79-C4V7
6616	4822 130 34167	BZX79-C6V2
6632	4822 130 30621	1N4148
6633	4822 130 30621	1N4148
6635	4822 130 82911	LED
6637	4822 130 82911	LED
6638	4822 130 82911	LED
6639	4822 130 82911	LED
6640	4822 130 82911	LED
6648	4822 130 82911	LED
6650	4822 130 82911	LED
6651	4822 130 82911	LED
6652	4822 130 82911	LED
6653	4822 130 82911	LED
6654	4822 130 82911	LED
6655	4822 130 82911	LED
6666	4822 130 82911	LED
6690	5322 130 34834	BZX79-C3V6
6691	5322 130 34834	BZX79-C3V6
6692	5322 130 34834	BZX79-C3V6
6693	5322 130 34834	BZX79-C3V6
6700	4822 130 81254	GP1U520X

TRANSISTORS & IC's

7250	4822 130 40937	BC548B
7251	4822 130 40937	BC548B
7252	4822 209 80891	78M05CT
7255	4822 209 83274	NJM4560D
7256	4822 130 41691	BC556B
7257	4822 130 41691	BC556B
7258	4822 130 42607	BF483
7259	4822 130 42607	BF483
7260	4822 130 40937	BC548B
7261	4822 130 40937	BC548B
7264	4822 130 40937	BC548B
7265	4822 130 40937	BC548B
7266	4822 130 44197	BC558B
7267	4822 130 44197	BC558B
7268	4822 130 62963	B2SD1894
7269	4822 130 62963	B2SD1894
7274	4822 130 62962	B2SD1254
7275	4822 130 62962	B2SD1254
7276	4822 130 40937	BC548B
7277	4822 130 44461	BC546B
7279	4822 130 44461	BC546B
7280	4822 130 44461	BC546B
7281	4822 130 62952	BDT61F
7282	4822 130 40824	BD136
7283	4822 130 40937	BC548B
7284	4822 130 40937	BC548B
7285	4822 130 40937	BC548B
7286	4822 130 40941	BC558
7287	4822 130 40937	BC548B
7401	4822 209 70157	NJM4560DD
7402	4822 209 72748	LC7821
7404	4822 209 30986	IC LC4966
7405	4822 130 40937	BC548B
7601	4822 130 40937	BC548B
7602	4822 130 40937	BC548B
7603	4822 209 30941	NJM2068D
7604	4822 130 40937	BC548B
7605	4822 209 10263	HEF4052BP
7607	4822 130 40937	BC548B
7608	4822 130 40937	BC548B
7609	4822 209 83274	NJM4560D
7610	4822 209 63667	BA6229
7611	5322 130 42216	TL081CP
7612	4822 130 44197	BC558B
7631	4822 130 40937	BC548B
7633	4822 130 40937	BC548B
7636	4822 130 40937	BC548B
7639	4822 130 44197	BC558B
7647	4822 209 61522	PC74HCT4094P
7648	4822 209 61522	PC74HCT4094P
7649	4822 209 30882	NM93C13BN
7650	4822 209 30881	MC68HC05C

A92-272

Service
Service
Service

Product Service Group CE Audio

Service Information

GB
To adapt the service manual the following sheets have been added/changed.

F
Afin de pouvoir adapter le "manual service" les feuillets suivants ont été soit modifiés, soit ajoutés.

NL
Voor het aanpassen van de service manual zijn de onderstaande pagina's toegevoegd/gewijzigd.

D
Zür anpassung des Service Manual sind die nachstehenden Seiten hinzugefügt/geändert.

I
Le seguenti pagine sono state cambiate/aggiunte allo scopo di adattare il Manuale di Servizio.

	Page	Reason
Electrical adjustments	6a	Update
Front selector 1 diagram	9a-11a	Update
Front selector 2 diagram	12a-14a	Update
Front selector PCB	15a-17a	Update
Power unit diagram	18a-20a	Update
Power unit PCB	21a-23a	Update
List of mechanical parts	24a	Update
List of electrical parts	27a-32a	Update

1992-10-09

4822 725 23941

PCS 57 839

DISMANTLING INSTRUCTIONS

GB

Safety regulations require thatthe set be restored to its original condition and that parts which are identical with those specified be used.

NL
Veiligheidsbepalingen vereisen dat het apparaat in zijn oorspronkelijke toestand wordt teruggebracht en dat onderdelen, identiek aan de gespecificeerde worden toegepast.

D

Bei jeder Reparatur sind die geltenden Sicherheitsvorschriften zu beachten. Der Originalzustand des Geräts darf nicht verändert werden für Reparaturen sind.Original-Ersatzteile zu verwenden.

I

Le norme di sicurezza esigono che l'apparecchio venga rimesso nelle condizione originali e che iano utilizzati pezzi di ricambiago identici a quelli specificati.

F

Les normes de sécurité exigent que lappareil soit remis à létat d'origine et que soient utilisées les pieces de rechange identiques à celles spécifiées.

Pour votre sécurité, ces documents doivent etre utilisés par des specialistes agrées, seuls habilités à réparer votre appareil en panne.

WARNINGS

GB WARNING

All IC_s and many other semi conductors are susceptible to electrostatic discharges (ESD).
Careless handling during repair can reduce life drastically.When reparing, make sure that you are connected with the same potential as the mass of the set via a wrist wrap with resistance. Keep components and tools also at this potential.

NL WAARSCHUWING

Alle ICs en vele andere halfgeleiders zijn gevoelig voor electrostatische ontladingen (ESD)
Onzorgvuldig behandelen tijden reparatie kan de levensduur drastisch doen verminderen. Zorg ervoor dat U tijdens reparatie via een polsband met weerstand verbonden bent met hetzelfde potentiaal als de massa van het apparaat.
Houd componenten en hulpmiddelen ook op ditzelfde potentiaal.

D WARNUNG

Alle IC_s und viele andere Halbleiter sind empfindlich gegenüber electrostatischen Entladungen (ESD).
Unsorgfältige Behandlung im Reparaturfall kan die Lebensdauer drastisch reduzieren. Veranlassen Sie, dass Sie im Reparaturfall über ein Pulsarmband mit Widerstand verbunden sind mit dem gleichen Potential wie die Masse des Gerätes.
Bauteile und Hilfsmittel auch auf dieses gleiche Potential halten.

F ATTENTION

Tous les IC e beaucoup d'autre semi-conducteurs sont sensibles aux décharges statiques (ESD).
Leur longévité pourrair etre considérablement écourtée par le fait qu'aucune precaution n'est prise à leur manipulation.
Lors de réparations, s'assurer de bien etre relié au meme potentiel que la masse de l'appareil et enfiler le bracelet serti d'une résistance de sécurité.
Veiller á ce que les composants ainsi que les outils que l'on utilise soient également á ce potentiel.

I AVERTIMENTO

Tutti IC e parecchi semiconduttori sono sensibili alle scariche statiche. (ESD)
La loro longevità potrebbe essere fortemente ridatta in caso di non osservazione della più grande cauzione alla loro manipolazione. Durante le riparazioni occorre quindi essere collegato allo stesso potenziale che quello della massa dell apparecchio tramite un braccialetto a resistenza.
Assicurarsi che i componenti e anche gli utensili con quali si lavora siano anche a questo potenziale.

Service Test Program

Processor Test

The test can be called up by pressing the keys Loudness and mute at te same time when te amplifier is switched on.The following lamps and leds will now be lit. Step A (fig 1)

When any key is pressed the following lamps and leds will now lit. Step B (fig 1) Press again a key to step F and check every step. (fig 1)
a:

When a key is pressed after step F the volume knob turns for about 4 seconds right and 4 seconds left. After the volume controle check a eeprom check is started. When after 0.2 seconds the magic touch is used to wake up the amplifier,the amplifier will come up with setting G (fig 1)

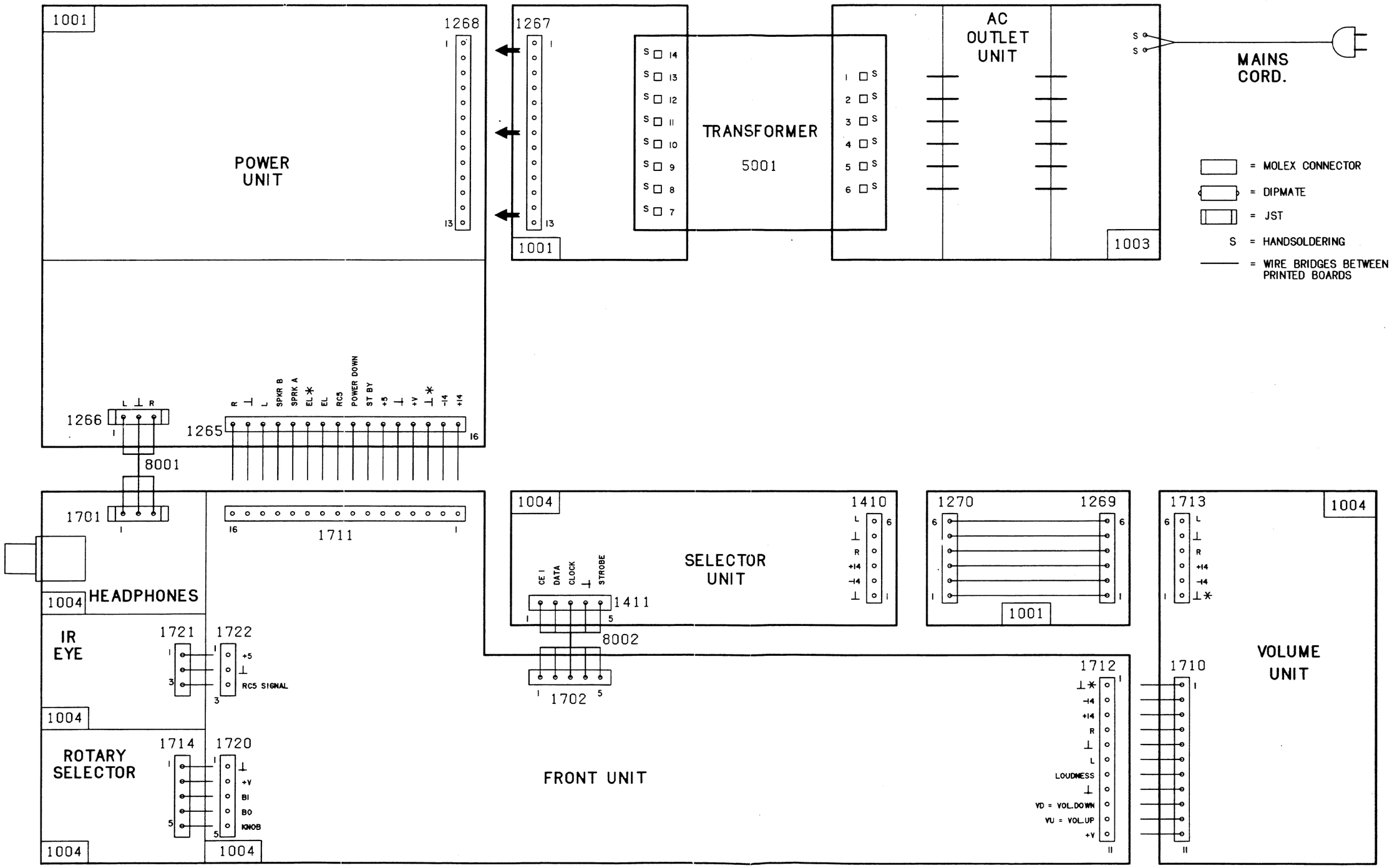
When setting G is wrong check eeprom!!

Steps	A	B	C	D	E	F	G
Indication Leds							
CD	off	off	off	off	off	on	off
DCC	off	off	off	off	on	off	off
TV/AUX	off	off	off	on	off	off	off
TUNER	off	off	on	off	off	off	off
PHONE	off	on	off	off	off	off	off
TAPE	on	off	off	off	off	off	on
Source Leds							
St/BY	on	off	on	off	on	off	off
Speak.A	off	on	off	on	off	on	on
Speak.B	on	off	on	off	on	off	off
Auto sel	off	on	off	on	off	on	on
Sour.Dir.	on	off	on	off	on	off	off
Loudness	off	on	off	on	off	on	on
Mute	on	off	on	off	on	off	off

Quiescent Current

SK.... SWITCH	SIGNAL	TO	VOLUME	ADJUST	OSILLOSCOPE	D.C.METER INDICATOR
STAND - BY			Min.	L ch R 3285		L ch. 1 2 DC 12 mV
				R ch. R 3284		R ch. 3 4 DC 12 mV

- Check for good thermal contact between power transistor and heatsink.
- Mains Voltage 220V /00 240V /05 5%
- Ambient themperature =20° 5° and heatsink must be atambient temperature.
- Set volume position to minimum.
- Disconnect speakers or place the set on stand-by position.
- Trimpotmeter in clock wize position.
- The adjustment must be finished for both channels 20sec after power on.


1001
1268
1
13
POWER UNIT
1267
1
13
1001
S 14
S 13
S 12
S 11
S 10
S 9
S 8
S 7
TRANSFORMER
5001
1 S
2 S
3 S
4 S
5 S
6 S
AC OUTLET UNIT
1003
S
S
MAINS CORD.
= MOLEX CONNECTOR
= DIPMATE
= JST
S = HANDSOLDERING
= WIRE BRIDGES BETWEEN PRINTED BOARDS
1266
L ⊥ R
1265
R ⊥ L SPKR B SPRK A EL ✳ EL RC5 POWER DOWN ST BY +5 ⊥ +V ⊥ ✳ -14 +14
16
8001
1701
1711
16
HEADPHONES
1004
IR EYE
1721
1722
+5
⊥
RC5 SIGNAL
ROTARY SELECTOR
1714
1720
⊥
+V
BI
BO
KNOB
1004
1004
1004
SELECTOR UNIT
1410
L
⊥
R
+14
-14
⊥
1411
CE I
DATA
CLOCK
⊥
STROBE
8002
1702
FRONT UNIT
1270
1269
1001
1712
⊥ ✳
-14
+14
R
⊥
L
LOUDNESS
⊥
VD = VOL.DOWN
VU = VOL.UP
+V
1713
1004
L
⊥
R
+14
-14
⊥ ✳
1710
VOLUME UNIT

Sytel

9a

10a

SELECTOR UNIT

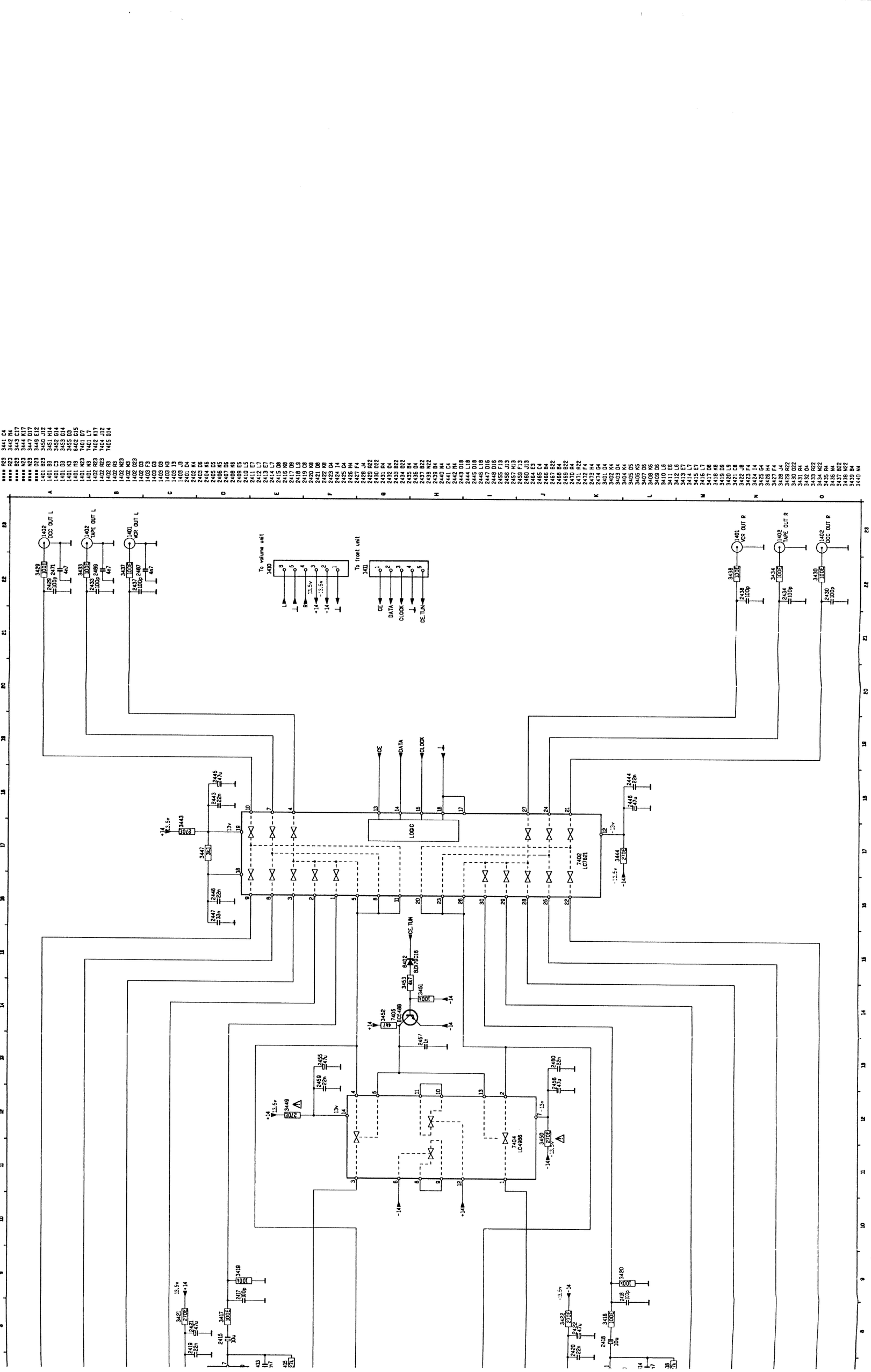
DCC IN L
TAPE IN L
TV/AUX/VCR IN L
CD IN L
PHONO IN L
TUNER IN L
PROCESS OUT L
PROCESS IN L
PROCESS IN R
PROCESS OUT R
TUNER IN R
PHONO IN R
CD IN R
TV/AUX/VCR IN R
TAPE IN R
DCC IN R

7401 NJM4560DD
7404 LC4966
7405 BC548B
7402 LC7821
BZX79C18

LOGIC

CE
DATA
CLOCK
CE.TUN

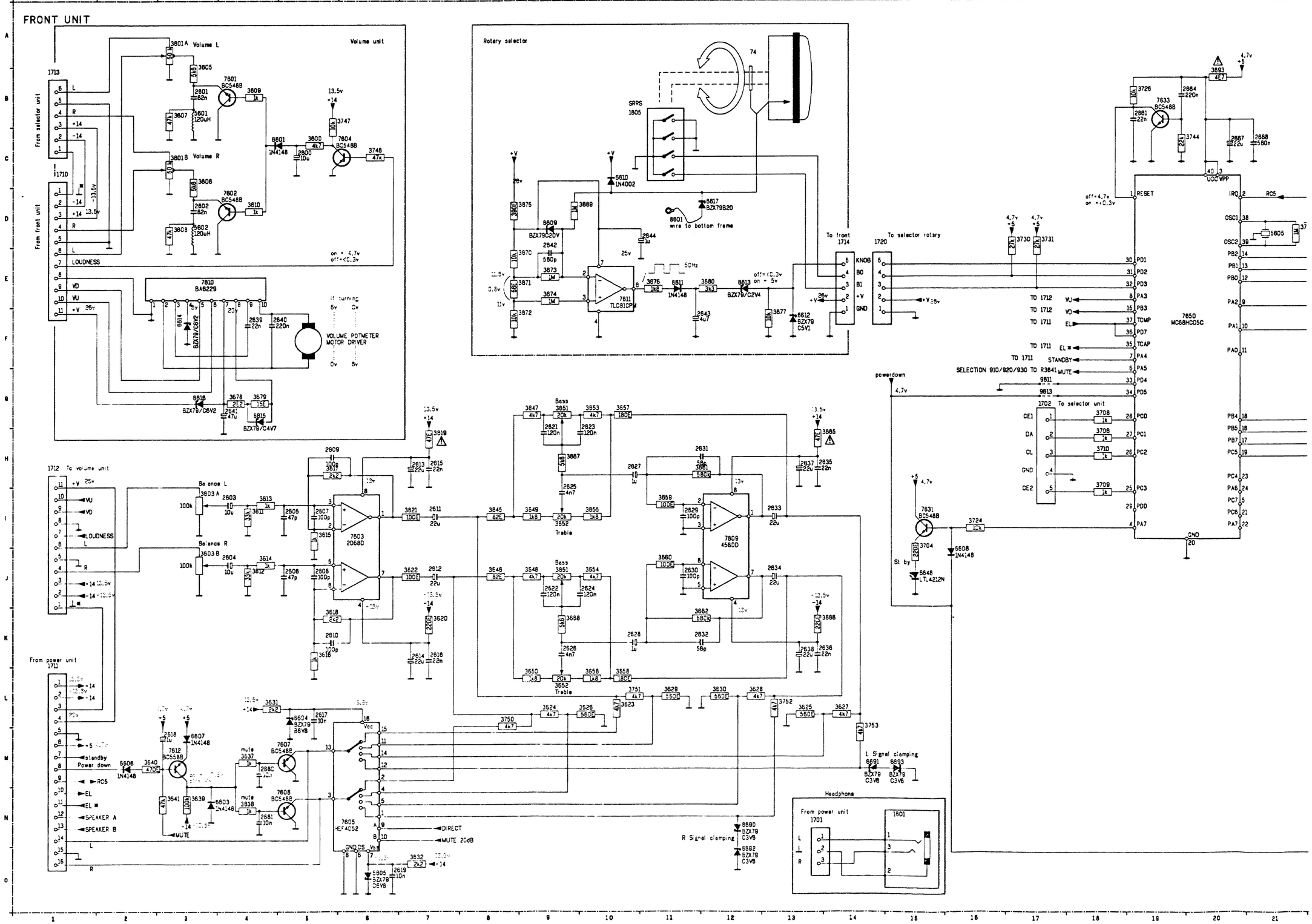
ES.3104-217-29310.SERV.ES-UNIT


LOGIC
7402 LC7821
7404 LC4866
7405 BC548B
8402 BZX79C18
1401 VCR OUT L
1402 TAPE OUT L
1402 DCC OUT L
1401 VCR OUT R
1402 TAPE OUT R
1402 DCC OUT R
To volume unit
1410
To front unit
1411
CE
DATA
CLOCK
CE_TUN
+14
-14
13.5v
-13.5v
13v

12a

1601 N15	1720 D14	2608 J5	2617 L5	2627 M10	2636 K13	2661 B19	2680 M4	3611 I4	3620 K7	3629 L11	3645 I8	3652 L9	3661 H12	3672 F8	3693 B20	3706 H18	3730 D17	3744 C19	6601 C5	6611 E11	6635 J26	6653 M26	7601 B4	7611 E10	7650 F20							
1607 F25	2600 C5	2609 H5	2618 M3	2628 K10	2637 H13	2662 C25	2681 N4	3612 J4	3621 J7	3630 L12	3646 J8	3653 G10	3662 K12	3673 E9	3696 I25	3708 G18	3731 D17	3745 D21	6603 N3	6612 F13	6637 I26	6654 M26	7602 D4	7612 M3	9611 G17							
1608 E24	2601 B3	2610 K5	2619 D6	2629 I11	2638 K13	2663 M22	3600 C5	3613 I4	3622 J7	3631 L4	3647 G9	3654 J10	3665 H13	3674 E9	3697 I25	3709 I18	3732 D24	3746 C6	6604 L5	6613 E12	6638 I26	6655 N26	7603 I6	7631 I15	9613 G17							
1609 F24	2602 D3	2611 I7	2621 H9	2630 J11	2639 F4	2664 B19	3605 B3	3614 J4	3623 L10	3632 D7	3648 J9	3655 I10	3666 K13	3675 D8	3698 J25	3710 H18	3733 D25	3747 B5	6605 D6	6614 F3	6639 K26	6666 J26	7604 C5	7633 B19	120uH B3							
1610 F24	2603 I4	2612 J7	2622 J9	2631 H12	2640 F4	2667 C20	3606 C3	3615 I5	3624 L9	3637 M4	3649 I9	3656 L10	3667 H9	3676 E11	3699 J25	3711 H25	3734 D25	3750 L8	6606 M2	6615 G4	6640 J26	6690 M12	7605 M6	7636 D23	120uH D3							
1611 E24	2604 J4	2613 H7	2623 H10	2632 K12	2641 G4	2668 C21	3607 B3	3616 K5	3625 L13	3638 M4	3650 L9	3657 G10	3668 K9	3677 F13	3700 K25	3714 I25	3735 B24	3751 L10	6607 M3	6616 G3	6648 J15	6691 M14	7607 M5	7639 C24								
1635 E25	2605 I5	2614 K7	2624 J10	2633 I13	2642 E8	2669 I23	3608 D3	3617 M5	3526 L10	3639 M3	3651 G9	3658 L10	3669 D9	3678 G4	3702 K25	3724 I16	3740 C24	3752 L13	6608 J16	6617 D12	6650 L26	6692 D12	7608 M5	7647 J24								
1702 G17	2606 J5	2615 M7	2625 I9	2634 J13	2643 F11	2670 L23	3609 B4	3618 K5	3527 L14	3640 M2	3651 J9	3659 I11	3670 E8	3679 G4	3703 L25	3726 B19	3741 C24	3753 M14	6609 D9	6632 E24	6651 L26	6693 M15	7609 I12	7648 M24								
1714 D14	2607 I5	2616 K7	2626 K9	2635 H13	2644 D11	2672 J22	3610 D4	3619 H7	3528 L12	3541 M3	3652 I9	3660 J11	3671 E8	3680 E12	3704 J15	3728 D24	3742 C23	5605 D21	6610 C10	6633 F24	6652 H26	6700 C26	7610 E3	7649 H23								

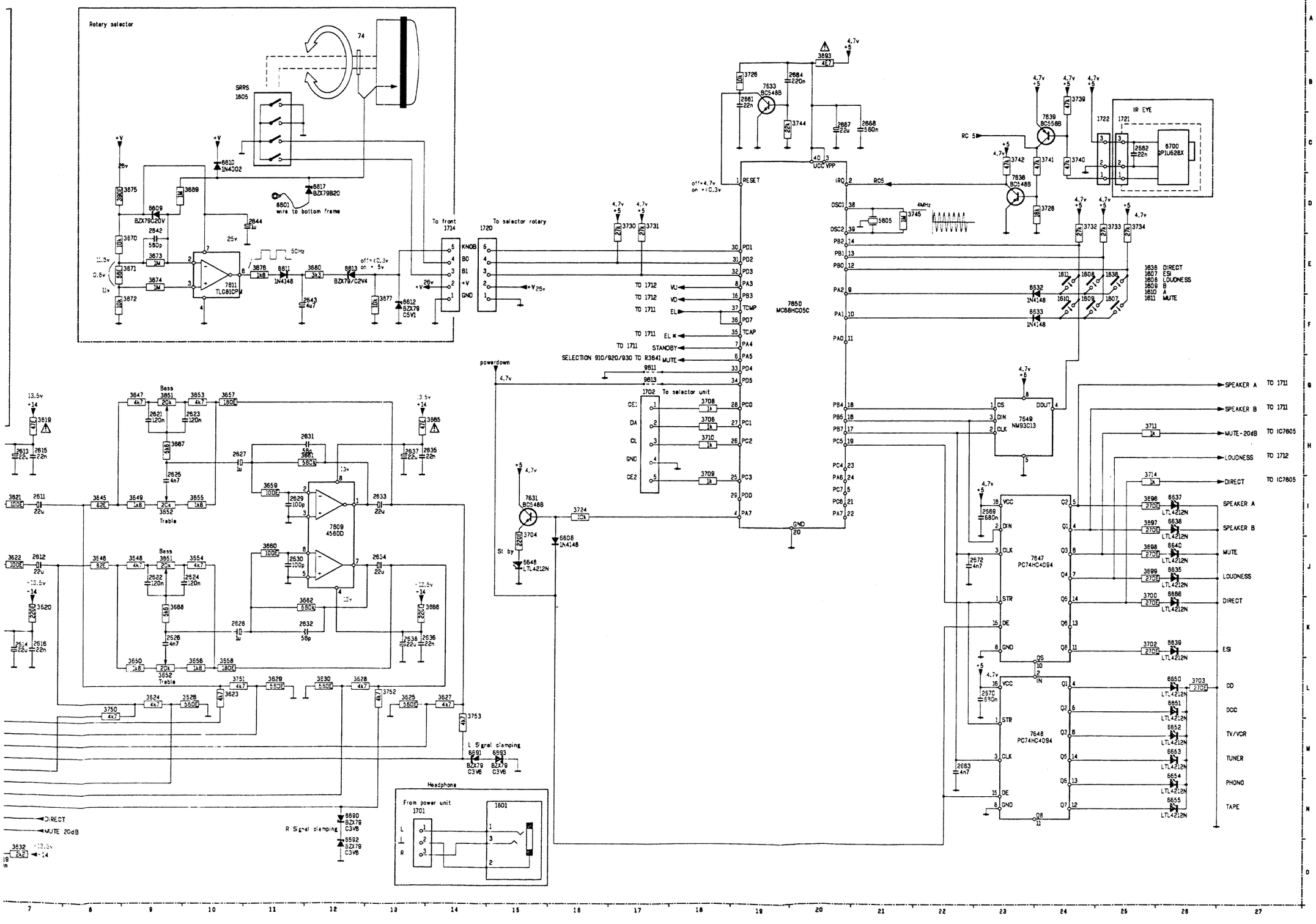
13a



1645 I8	3652 L9	3661 M12	3672 F8	3693 B20	3706 H18	3730 D17	3744 C19	6601 C5	6611 E11	6635 J26	6653 M26	7601 B4	7611 E10	7650 F20					
1645 J8	3653 G10	3662 K12	3673 E9	3696 I25	3708 G18	3731 D17	3745 D21	6603 N3	6612 F13	6637 I26	6654 M26	7602 D4	7612 M3	9611 D17					
1647 D9	3654 J10	3665 H13	3674 E9	3697 I25	3709 I18	3732 D24	3746 C6	6604 L5	6613 E12	6638 I26	6655 M26	7603 I6	7631 I15	9613 D17					
1648 J9	3655 I10	3666 K13	3675 D8	3698 J25	3710 H18	3733 D25	3747 B5	6605 D6	6614 F3	6639 K26	6656 J26	7604 C6	7633 B19	120uH B3					
1649 I9	3656 L10	3667 H9	3676 E11	3699 J25	3711 H25	3734 D25	3750 L8	6606 M2	6615 G4	6640 J26	6690 M12	7605 M6	7636 D23	120uH D3					
1650 L9	3657 G10	3668 K9	3677 F13	3700 K25	3714 I25	3739 B24	3751 L10	6607 M3	6616 G3	6648 J15	6691 M14	7607 M5	7639 C24						
1651 D9	3658 L10	3669 D9	3678 G4	3702 K25	3724 I16	3740 C24	3752 L15	6608 J16	6617 D12	6650 L26	6692 D12	7608 M5	7647 J24						
1651 J9	3659 I11	3670 E8	3679 G4	3703 L26	3726 B19	3741 C24	3753 M14	6609 D9	6632 E24	6651 L26	6693 M15	7609 I12	7648 M24						
1652 I9	3660 J11	3671 E8	3680 E12	3704 J15	3728 D24	3742 C23	5605 D21	6610 C10	6633 F24	6652 M26	6700 C26	7610 E3	7649 M23						

13a

14a



15a

16a

D074	C13	2612	G12	3616	H11	6615	E 9	9687	E 5
1401	A 1	2613	H12	3617	I12	6616	D11	9688	C 6
1401	B 1	2614	H12	3618	H12	6617	B13	9689	G 5
1401	B 1	2615	H12	3619	I13	6632	H 3	9690	H 5
1401	C 1	2616	H12	3620	I13	6633	I 3	9691	G 5
1402	C 1	2617	F12	3621	I12	6635	I11	9692	C 6
1402	D 1	2618	G11	3622	G12	6637	I 4	9693	I 6
1402	D 1	2619	F13	3623	F12	6638	I 5	9694	G 6
1402	E 1	2621	H 7	3624	G12	6639	I 6	9694	G 8
1403	F 1	2622	H 6	3625	F13	6640	I12	9696	C 6
1403	F 1	2623	H 7	3626	G13	6648	I 1	9697	C 6
1403	G 1	2624	H 6	3627	F12	6650	G 5	9698	F11
1410	D 8	2625	H 8	3628	G12	6651	G 6	9699	G 3
1411	B 8	2626	H 8	3629	F13	6652	G 7	9701	F 6
1601	A 9	2627	H 9	3630	G13	6653	G 9	9702	D 6
1605	B12	2628	H 9	3631	F12	6654	G10	9703	D 6
1607	J 6	2629	I 9	3632	H13	6655	G11	9704	D 6
1608	J11	2630	H 9	3637	F11	6666	I 8	9705	D 6
1609	J 5	2631	H 9	3638	F11	6690	F12	9706	A 6
1610	J 4	2632	H 9	3639	G11	6691	F13	9707	A 6
1611	J12	2633	I 9	3640	G 4	6692	F12	9708	G 6
1636	J 8	2634	H 9	3641	H 4	6693	F13	9710	D 6
1701	A11	2635	H10	3645	H 7	6700	I 2	9712	B 6
1702	F 3	2636	I10	3646	H 7	7401	B 4	9714	E 6
1710	C12	2637	H10	3647	H 6	7402	D 4	9715	E 6
1711	G 5	2638	I10	3648	H 6	7404	B 6	9717	B 7
1712	G12	2639	E10	3649	H 7	7405	A 6	9718	E 7
1713	E11	2640	D10	3650	H 7	7601	D10	9720	E 7
1714	B12	2641	E10	3651	H 6	7602	D10	9721	I 7
1720	F 3	2642	B12	3652	H 8	7603	H12	9726	F 6
1721	I 3	2643	A12	3653	I 6	7604	E11	9728	D 7
1722	I 3	2644	A12	3654	I 6	7605	F13	9734	C 7
2401	A 2	2661	H 3	3655	H 7	7607	F11	9736	D 7
2402	A 2	2662	I 3	3656	I 7	7608	F11	9737	C10
2403	B 3	2663	F 8	3657	I 7	7609	H10	9744	B 8
2404	A 3	2664	H 2	3658	I 7	7610	E10	9746	B 9
2405	B 3	2667	G 2	3659	H 9	7611	A13	9748	I 9
2406	A 3	2668	H 2	3660	H 9	7612	G11	9753	I 4
2407	B 4	2669	H 5	3661	H 9	7631	I 1	9754	G12
2408	A 4	2670	F 7	3662	H 9	7633	I 2	9755	F 5
2409	B 3	2672	I 6	3665	H10	7636	H 2	9756	G10
2410	A 3	2680	F11	3666	I10	7639	H 2	9761	G12
2411	B 3	2681	F11	3667	H 6	7647	I 5	9762	G 5
2412	A 3	3401	B 2	3668	H 6	7648	F 8	9765	C10
2413	B 4	3402	A 2	3669	B13	7649	I 4	9766	C10
2414	A 4	3403	B 2	3670	B13	7650	H 3	9770	F12
2415	B 5	3404	A 2	3671	B13	9600	F 2	9771	G12
2416	A 5	3405	B 3	3672	A13	9601	G 4	9772	H10
2417	B 5	3406	A 3	3673	B13	9602	G 4	9773	A10
2418	A 5	3407	B 3	3674	A13	9603	F 4	9774	B10
2419	B 4	3408	A 3	3675	B12	9605	G 4	9777	D11
2420	B 3	3409	B 4	3676	A12	9606	F 4	9778	D11
2421	B 4	3410	A 4	3677	B12	9607	G 3	9779	D11
2422	A 4	3411	B 3	3678	E10	9608	G 3	9780	F12
2423	G 2	3412	A 3	3679	E 9	9609	H 1	9781	F11
2424	G 2	3413	B 3	3680	A12	9610	G 4	9782	F11
2425	F 2	3414	A 3	3693	I 2	9611	G 3	9784	F11
2426	F 2	3415	B 4	3696	I 5	9613	G 3	9785	H12
2427	E 2	3416	A 4	3697	I 5	9615	G 4	9788	H12
2428	E 2	3417	B 4	3698	I11	9616	D 3	9789	G12
2429	E 2	3418	A 4	3699	I10	9617	D 3	9790	G12
2430	E 2	3419	B 5	3700	I 9	9618	C 3	9792	I12
2431	D 2	3420	A 5	3702	I 6	9619	C 3	9793	E10
2432	D 2	3421	A 5	3703	F 6	9620	C 3	9794	E10
2433	D 2	3422	A 5	3704	H 1	9621	C 3	9795	E10
2434	D 2	3423	G 2	3706	F 3	9622	C 3	9796	G13
2435	C 2	3424	G 2	3708	F 3	9623	D 3	9797	I 3
2436	C 2	3425	F 2	3709	F 3	9624	D 3	9800	F13
2437	C 2	3426	F 2	3710	F 3	9625	D 3	9801	G13
2438	C 2	3427	E 2	3711	I12	9627	D 3	9804	I13
2439	B 2	3428	E 2	3714	I10	9628	G 4	9805	I 3
2440	B 2	3429	E 2	3724	I 2	9629	C 4	9810	B12
2441	B 2	3430	E 2	3726	I 3	9630	G 4	9813	B12
2442	B 2	3431	E 2	3728	H 1	9631	G 4	9816	I13
2443	C 5	3432	D 2	3730	G 3	9632	H 4	9820	G10
2444	D 5	3433	D 2	3731	G 3	9633	G11	9821	G10
2445	C 5	3434	D 2	3732	I 4	9636	D 4		
2446	D 5	3435	D 2	3733	I 4	9640	C 4		
2447	D 5	3436	C 2	3734	I 4	9641	G 4		
2448	D 5	3437	C 2	3739	H 1	9642	G 4		
2455	B 5	3438	C 2	3740	H 1	9643	H 2		
2456	B 6	3439	C 2	3741	H 1	9645	D 4		
2457	B 6	3440	B 2	3742	H 1	9653	H 5		
2459	B 5	3441	B 2	3744	I 3	9658	C 4		
2460	B 6	3442	B 2	3745	H 2	9659	B 4		
2464	A 2	3443	C 5	3746	D11	9661	C 4		
2465	B 2	3444	D 5	3747	D12	9662	D 4		
2466	B 2	3447	C 5	3750	G12	9663	H 5		
2467	C 2	3449	B 7	3751	F12	9665	H 5		
2468	C 2	3450	B 7	3752	F12	9666	H 2		
2469	D 2	3451	A 6	3753	F12	9667	F 5		
2470	D 2	3452	A 6	5601	E11	9668	G 4		
2471	E 2	3453	A 6	5602	E12	9671	H 5		
2472	F 2	3455	A 2	5605	H 2	9672	H 5		
2473	F 2	3500	D11	5402	A 7	9673	I 4		
2474	G 2	3601	C10	6601	D11	9674	F 5		
2600	E11	3603	H10	6603	G11	9675	H 5		
2601	D11	3605	D10	6604	F12	9676	B 5		
2602	D12	3606	D10	6605	H13	9677	I 5		
2603	H11	3607	D11	6606	G 3	9678	H 5		
2604	H11	3608	D11	6607	G11	9679	E 5		
2605	I11	3609	D11	6608	H 2	9680	C 5		
2606	H11	3610	D11	6609	B12	9681	G 5		
2607	I11	3611	H11	6610	B13	9682	C 5		
2608	H11	3612	H11	6611	A12	9683	D 5		
2609	I12	3613	I11	6612	B12	9684	E 5		
2610	H12	3614	H11	6613	B12	9685	H 5		
2611	I12	3615	I11	6614	E10	9686	C 5		

Sypd

16a

17a

ROTARY UNIT

VOLUME UNIT

FRONT UNI T

1 = PHONE R OUT
2 = I N R
3 = I N R
4 = -13V
5 = I N L
6 = I N L
7 = PHONE L OUT
8 = 13 V

CE
DATA
CLOCK
DR TUN

1 = R OUT
2-3 = R IN
4 = -13V
5-6 = L IN
7 = L OUT
8 = 13V

4 = ⊥
7 = 24v

0. 6V

1 = ⊥
4 = 6v
7 = 20v

7 = -6. 8v
16 = 6. 8v

a = 4v
c = on = -0. 6v
off = 4v

1 = R OUT
2-3 = R IN
4 = -13V
5-6 = L IN
7 = L OUT
8 = 13V

8 = 4.7v
16 = ⊥

8 = ⊥
16 = 4.7v

ock
mhz
4.7v

3104-217-29310 .3 FA920

POWER UNIT

1265 to front

short circuit protection for dc on output

AC peak current limiter

quiesent current : adjust 3254 for 6mV DC-voltage (AF-input grounded)

OUTPUT BOARD

5254 RELAY

5255 RELAY B

5256 RELAY A

1263 SPEAKERS A

1263 SPEAKERS B

B LEFT

A LEFT

B RIGHT

A RIGHT

POWER DOWN

STAND BY

SPEAKER B

SPEAKER A

EASY LINK

RC5

EL ⌀

TO 1D04 ANALOG SELECTOR UNIT

TO 1D04 VOLUME

1269 1270

quiescent current : adjust 3285 for 6mV DC-voltage (AF-input grounded)

AC peak current limiter

5254 5255 5253

1263 SPEAKERS B

1263 SPEAKERS A

B LEFT A LEFT B RIGHT A RIGHT

OUTPUT BOARD

5256 RELAY A

5255 RELAY B

5254 RELAY

POWER DOWN

STAND BY

+14V

SPEAKER B

SPEAKER A

µP

26V +V

4.7V +5V

EASY LINK

RC6

EL ⌀

-14V

ANALOG

s/by +0.3v on=13.5v

on=4.7v off=0v

on= 0.7v off=0v

on=-13.5v s/by=-0.3v

5001

240V~ ONLY FOR /05 AND /10

220V~ NOT FOR /05 AND /10

220V~

*FUSE

MAINS

AC OUTLET UNIT

PART B

/01 VERSION

AC OUTLET UNIT PART A

DRAW POSITION 115V

AC OUTLET UNIT : /00 : 3104 217 28340
/05 : 3104 217 00420
/01 : 3104 217 01300
/10 : 3104 217 00420

Sup

21a 22a

1 2 3 4 5 6 7 8 9 10 11 12 13

A B C D E F G H I J

POWER UNIT

0021	E 8	3286	H 9	6319	H 4	9339	G 8
0024	G10	3287	H 5	6320	H 9	9341	F 8
1250	D 7	3288	H10	6321	H 5	9343	G 8
1251	D 7	3289	H 6	7250	F 4	9344	C 8
1259	D 9	3290	H10	7251	G 3	9345	D 8
1260	D 9	3291	H 6	7252	G10	9349	E 8
1261	H12	3294	H 8	7255	F 4	9350	D 9
1262	F12	3295	G 4	7256	F 4	9351	D 9
1263	B12	3296	H10	7257	G 4	9353	A 9
1265	B 2	3297	H 5	7258	G 5	9354	D 9
1266	B 9	3298	H 9	7259	H 6	9355	H 9
1267	F 2	3299	H 5	7260	I 8	9356	D 9
1268	B 5	3300	E 4	7261	I 5	9358	A 9
1269	F13	3301	G 3	7264	G 8	9359	A 9
1270	H13	3302	H 8	7265	G 3	9360	D 9
2250	E 3	3303	H 4	7266	H 9	9361	H 9
2251	G 3	3304	G 8	7267	H 5	9362	C 9
2254	F 4	3305	H 4	7268	I 8	9363	A10
2255	G 3	3306	G 9	7269	I 4	9364	D10
2258	E 3	3307	H 4	7274	I 9	9365	D10
2259	G 3	3308	F 4	7275	I 5	9366	F10
2260	F 5	3309	G 3	7276	F 5	9368	D10
2261	F 5	3310	E 4	7277	E 5	9369	D10
2262	E 4	3311	E 5	7279	A11	9370	D10
2263	G 3	3312	E 4	7280	A10	9371	B11
2264	G 5	3313	E 4	7281	I10	9373	F11
2265	H 6	3314	F 5	7282	H12	9375	D11
2268	F 5	3315	E 5	7283	H11	9376	D11
2269	G 5	3316	E 5	7284	E11	9377	D11
2270	G 7	3318	F 4	7285	H11	9379	H11
2271	H 4	3319	G 4	7286	G12	9380	C11
2273	H 3	3320	A11	7287	G11	9381	C11
2274	G 5	3321	A11	9250	G 1	9382	F11
2275	H 6	3330	H11	9251	G 1	9383	F11
2276	H 9	3331	H11	9252	G 1	9384	C11
2277	H 5	3332	H12	9253	G 2	9385	C11
2278	H 9	3333	H12	9254	G 2	9386	D11
2279	H 5	3341	H 3	9255	G 2	9387	F11
2280	F 3	3342	E10	9256	G 2	9388	F11
2281	G 3	3343	H10	9257	G 2	9389	F11
2282	G 5	3344	H10	9258	D 3	9390	C12
2283	G 6	3345	H10	9259	D 3	9391	H13
2284	F 6	3346	A 9	9260	D 3	9392	H13
2285	F 6	3347	A10	9261	B 3	9393	H13
2286	H 8	3348	B 9	9262	C 3	9394	H13
2287	G 4	3349	B 9	9263	B 3	9395	H13
2288	H 9	3350	F10	9254	B 4	9396	H13
2289	H 5	3354	F 4	9265	B 4	9397	G 4
2290	G12	3355	G 3	9266	E 3	9399	G 6
2292	F 5	3356	F 5	9267	D 4	9400	G 6
2293	E 5	3357	F 5	9268	B 4	9401	F 5
2294	G10	3358	F 6	9269	H 4	9402	F 6
2295	G10	3359	G 6	9270	D 4	9403	H 6
2296	E11	3359	F 6	9271	B 4	9405	F 6
2297	D10	3360	H 8	9273	B 4		
2298	D10	3361	H 4	9274	B 4		
2299	H 3	3370	E 3	9275	C 4		
2303	E 7	3371	G 4	9276	C 4		
2307	E 7	3372	E10	9277	H 4		
2309	F 7	3252	E 6	9278	C 4		
2313	E 9	5253	E 6	9279	G 4		
2314	E 9	5254	D 6	9280	G 4		
2315	E 9	5255	B11	9281	C 4		
2316	F10	5256	B10	9282	G 5		
2317	G10	6250	G 4	9263	C 4		
2318	G10	6252	F 5	9264	G 4		
2319	H10	6253	F 5	9265	C 5		
2321	D 3	6254	G10	9266	H 5		
2322	H11	6255	G11	9267	G 5		
2323	G 4	6257	H 4	9269	C 5		
2324	F 4	6268	F 4	9290	H 5		
2326	F 7	5269	G 3	9291	C 5		
2327	E 6	6270	E 5	9294	C 5		
2328	H11	6271	F 5	9295	F 6		
2330	E11	6272	F 5	9296	C 5		
2331	H12	6273	G10	9299	C 6		
3252	F 3	6274	E 4	9300	H 6		
3253	F 3	6274	E 3	9301	E 5		
3254	E10	6275	E 4	9302	E 5		
3255	E10	6276	E11	9304	C 6		
3256	G11	6277	E10	9305	D 6		
3257	F11	6278	E 9	9306	C 6		
3258	F 3	6279	E 9	9307	C 6		
3259	F 3	6280	E 9	9308	D 6		
3260	F12	6281	E 9	9310	C 6		
3261	G12	6282	H10	9311	H 6		
3262	G12	6283	E 7	9312	G 6		
3263	G11	6286	B11	9313	C 6		
3266	F 3	6287	B11	9314	D 6		
3267	G 3	6288	B11	9315	G 6		
3268	E 4	6289	B11	9316	G 6		
3269	G 3	6290	E 5	9317	C 6		
3270	F 6	6291	E 5	9318	C 7		
3271	G 6	6292	E 3	9319	D 7		
3272	G 5	6292	E 3	9320	F 7		
3273	H 6	6293	E 3	9323	H 7		
3274	F 5	6293	E 3	9324	C 7		
3275	G 5	6294	E 3	9327	H 6		
3276	G 5	6254	E 3	9328	C 7		
3277	G 6	6295	E 3	9329	D 7		
3278	G 7	6296	E 3	9330	G 7		
3279	H 3	6298	H12	9331	G 7		
3280	H 8	6299	H11	9332	H 7		
3281	H 4	6301	H11	9333	D 7		
3282	H 8	6303	H 4	9334	H 7		
3283	H 4	6304	H 8	9335	D 7		
3284	H 9	6305	E10	9337	G 7		
3285	H 4	6318	H 8	9338	D 7		

e=⊥ c=0v b=0.7v

e=-3.7v c=-3.7v b=-3v

e=⊥ c=0.7v b=0v

e=-3v c=-35v b=-3.7v

1=3.7v 4=-12v 7=-3.7v 8=12v

e=-3.7v c=-3.7v b=-3v

e=-36v c=1.2v b=-35v

e=0v c=1v b=1mv

e=-3v c=-35v b=-3.7v

e=3mv c=37v b=1v

e=-1v c=1v b=0v

e=0v c=-1v b=-1mv

e=-3mv c=-37v b=-1v

e=-36v c=-38v b=-38v

e=3mv c=37v b=1v

e=0v c=1v b=1mv

e=-1v c=1v b=0v

e=-3mv c=-37v b=-1v

e=0v c=-1v b=-1mv

1=24v 2=0.7v 3=5.3v

e=13.5v c=26v b=15.4v

e=-15v c=-13.5v b=-14v

e=-15v c=-24.5v b=-15.8v

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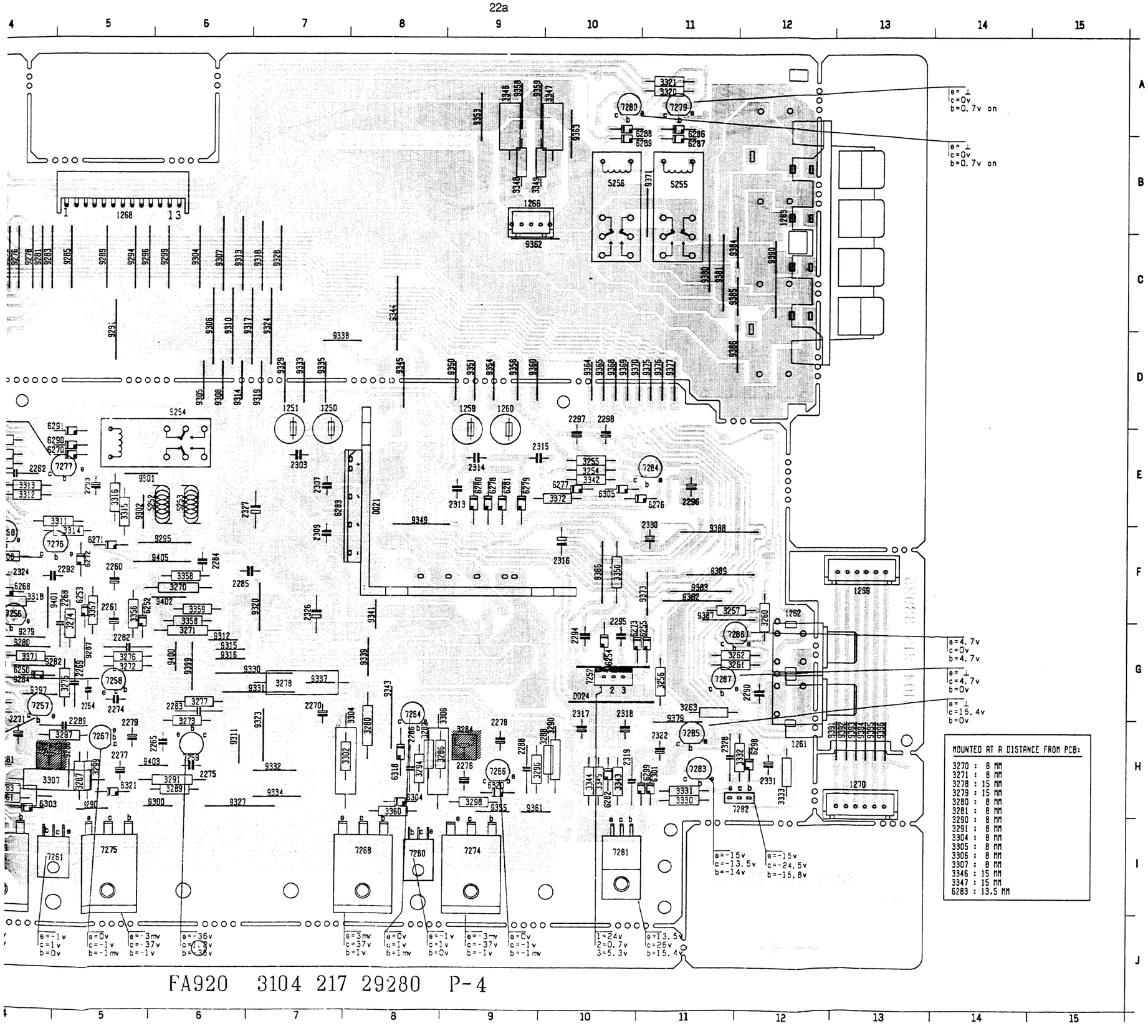
Sup1

22a

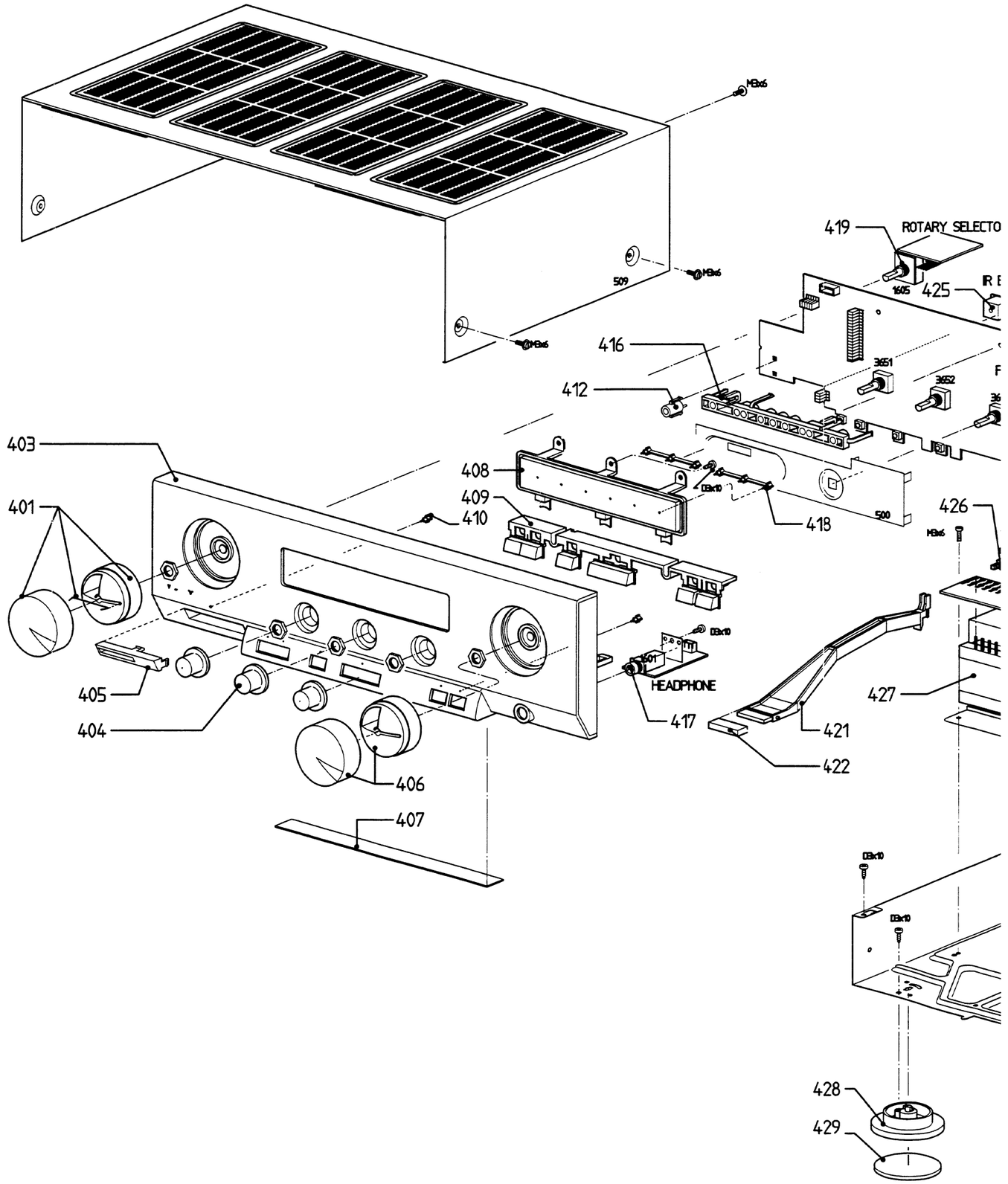
23a

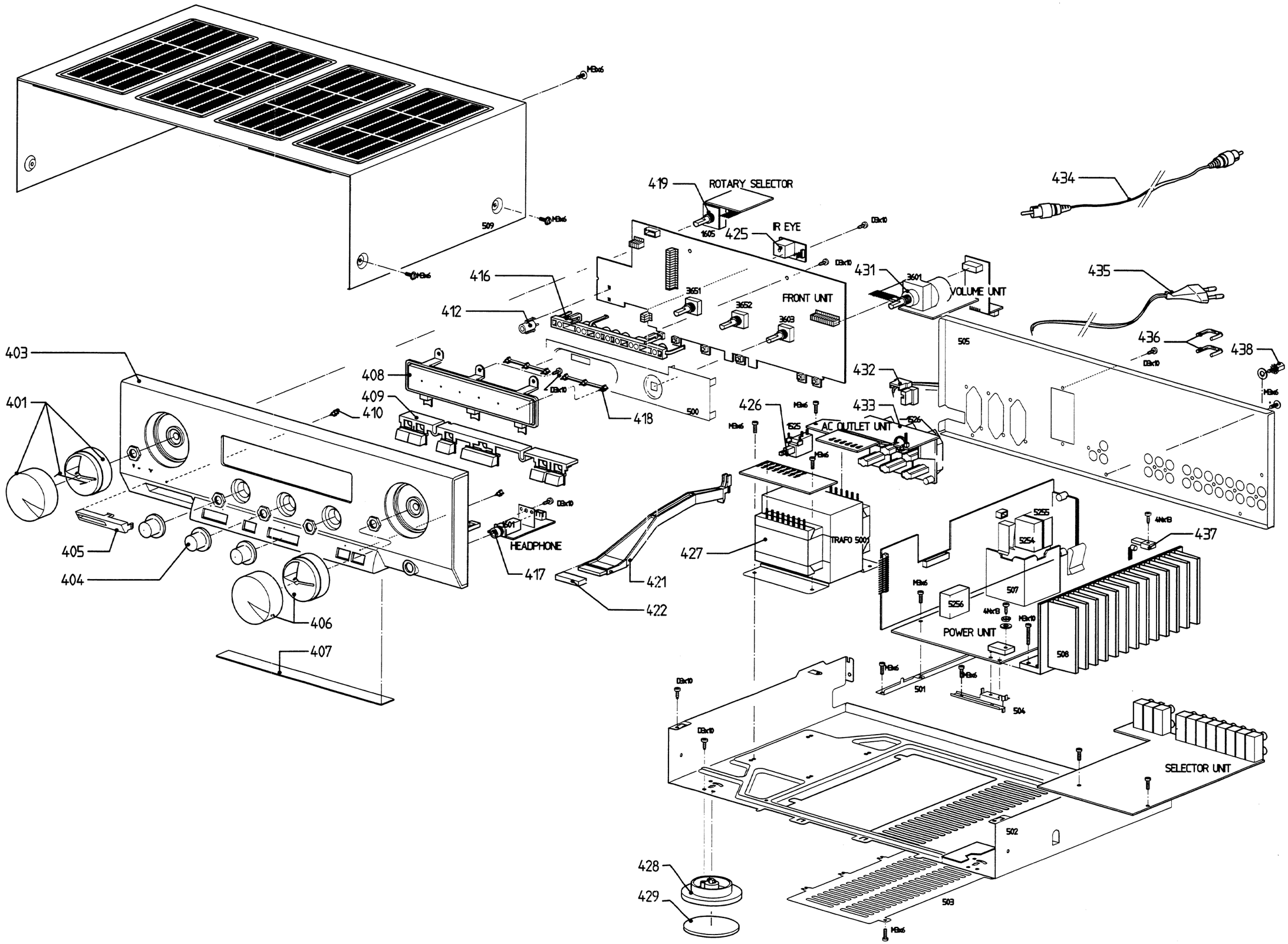


FA920 3104 217 29280 P-4

MECHANICAL PARTS

401	4822 410 61716	KNOB SOURCE SEL.ASSY
403	4822 426 51525	FRONT ASSY
404	4822 413 41696	KNOB
405	4822 450 61831	IR-WINDOW
406	4822 410 61717	KNOB VOLUME
407	4822 426 60621	STRIP
408	4822 459 20579	PLATE ORNAMENTAL
409	4822 278 10124	BUTTON ASSY
410	4822 380 20425	LED REFLECTOR
412	4822 255 41247	SOCKET ST-BY LED
416	4822 255 30217	LEDHOLDER
417	4822 267 31453	HEADPHONE SOCKET
418	4822 380 20424	REFLECTOR
419	4822 273 10237	ROTARY SWITCH
421	4822 404 21194	BRACKET
422	4822 462 71808	POWER CAP
425	4822 214 52009	IR EYE
426	4822 276 13224	POWER SWITCH TV 5
427	4822 145 40189	MAINS TRAFO
427	4822 146 31094	MAINS TRAFO /01
428	4822 462 41888	FOOT
429	4822 462 41887	FOOT FELT
431	4822 101 21175	VOLUME ASSY
432	4822 532 60948	BUSHING
433	4822 265 30998	MAINS OUTLET /05
433	4822 265 20544	MAINS OUTLET
434	4822 321 61478	CINCH CORD
435	4822 321 10781	MAINS CORD
436	4822 268 90449	JUMPER PLUG
437	4822 404 21195	TRANSISTOR BRACKET
438	4822 502 13921	PHONO GND SCREW
	4822 218 10439	RH6640/01
	4822 736 21321	IFU FA920




M3x6
509
419
ROTARY SELECTOR
1605
425
IR EYE
D3x10
434
416
412
3651
3652
3653
FRONT UNIT
431
3601
VOLUME UNIT
435
505
436
438
403
401
408
409
410
D3x10
418
500
426
M3x6
1525
AC OUTLET UNIT
433
1526
432
M3x6
405
404
406
407
501
D3x10
HEADPHONE
417
421
422
427
TRAFO 5001
5255
5254
4Nx18
437
507
5256
M3x6
4Nx18
M3x10
POWER UNIT
508
501
M3x6
504
D3x10
D3x10
SELECTOR UNIT
502
503
M3x6
428
429

MISCELLANEOUS

1250	4822 071 55002	FUSE 5A
1251	4822 071 55002	FUSE 5A
1259	4822 071 51002	FUSE 1A
1260	4822 071 51002	FUSE 1A
1261	4822 265 20542	PIN JACK
1262	4822 265 20543	PIN JACK
1401	4822 267 31451	PIN JACK
1402	4822 267 31451	PIN JACK
1403	4822 267 31449	PIN JACK
1525	4822 276 13224	POWER SWITCH TV 5
1526	4822 265 20544	MAINS OUTLET
1526	4822 265 30998	MAINS OUTLET /05
1527	4822 265 20544	MAINS OUTLET
1527	4822 265 30998	MAINS OUTLET /05
1528	4822 265 20544	MAINS OUTLET
1528	4822 265 30998	MAINS OUTLET /05
1531	4822 071 51002	FUSE 1A
1532	4822 272 10315	VOLT SEL. ONLY /01
1601	4822 267 31453	HEADPHONE SOCKET
1605	4822 273 10237	ROTARY SWITCH
1607	4822 276 13213	TACT SWITCH
1608	4822 276 13213	TACT SWITCH
1609	4822 276 13213	TACT SWITCH
1610	4822 276 13213	TACT SWITCH
1611	4822 276 13213	TACT SWITCH
1636	4822 276 13213	TACT SWITCH
	4822 492 70583	CLAMPING SPRING

CAPACITORS

2250	4822 124 40244	2,2µF 20% 63V
2251	4822 124 40244	2,2µF 20% 63V
2254	4822 122 31435	470pF 10% 50V
2255	4822 122 31435	470pF 10% 50V
2258	4822 124 40196	220µF 20% 16V
2259	4822 124 40196	220µF 20% 16V
2260	4822 124 41643	100µF 20% 16V
2261	4822 124 41643	100µF 20% 16V
2262	4822 122 10181	47pF 5% 50V
2263	4822 122 10181	47pF 5% 50V
2264	4822 122 33308	100pF 10% 500V
2265	4822 122 33308	100pF 10% 500V
2268	4822 122 10173	820pF 10% 50V
2269	4822 122 10173	820pF 10% 50V
2270	4822 124 40255	100µF 20% 63V
2271	4822 124 40255	100µF 20% 63V
2274	4822 126 12017	47pF NPO 500V
2275	4822 126 12017	47pF NPO 500V
2276	4822 124 41584	100µF 20% 10V
2277	4822 124 41584	100µF 20% 10V
2278	4822 124 41596	22µF 20% 50V
2279	4822 124 41596	22µF 20% 50V
2280	4822 122 10183	100pF 5% 50V
2281	4822 122 10183	100pF 5% 50V
2282	4822 122 10177	10nF 20% 25V
2283	4822 122 10177	10nF 20% 25V
2284	4822 121 41984	47nF 10% 400V
2285	4822 121 41984	47nF 10% 400V
2286	4822 126 11311	4,7nF 50V
2287	4822 126 11311	4,7nF 50V
2288	4822 126 11311	4,7nF 50V
2289	4822 126 11311	4,7nF 50V
2290	4822 121 43526	47nF 5% 100V
2292	4822 121 41854	150nF 5% 63V
2293	5322 124 41431	22µF 20% 35V
2294	5322 121 42661	330nF 5% 63V
2295	5322 121 42386	100nF 5% 63V
2296	4822 124 40201	1000µF 20% 16V
2297	5322 124 41431	22µF 20% 35V
2298	4822 124 40244	2,2µF 20% 63V
2303	4822 121 43875	47nF 5% 250V
2307	4822 121 43875	47nF 5% 250V
2309	4822 121 43875	47nF 5% 250V
2313	4822 121 41984	47nF 10% 400V
2314	4822 121 41984	47nF 10% 400V
2315	4822 121 41984	47nF 10% 400V
2316	4822 124 42367	3300µF 20% 35V
2317	5322 124 21189	100µF 20% 40V
2318	5322 124 21189	100µF 20% 40V
2319	4822 122 10158	1nF 10% 50V
2321	4822 122 10166	22nF 30% 16V
2322	4822 124 40433	47µF 20% 25V
2323	4822 124 40242	1µF 20% 63V
2324	4822 124 40242	1µF 20% 63V
2326	4822 124 80415	4700µF 20% 50V
2327	4822 124 80415	4700µF 20% 50V
2328	4822 122 10158	1nF 10% 50V
2330	4822 124 41334	470µF 20% 35V
2331	4822 124 40433	47µF 20% 25V
2401	4822 122 10183	100pF 5% 50V
2402	4822 122 10183	100pF 5% 50V
2403	4822 122 10183	100pF 5% 50V
2404	4822 122 10183	100pF 5% 50V
2405	4822 124 40242	1µF 20% 63V
2406	4822 124 40242	1µF 20% 63V
2407	4822 122 10158	1nF 10% 50V
2408	4822 122 10158	1nF 10% 50V
2409	4822 124 21212	15µF 20% 40V
2410	4822 124 21212	15µF 20% 40V
2411	4822 122 10177	10nF 20% 25V
2412	4822 122 10177	10nF 20% 25V
2413	4822 126 11309	2,7nF 10%Y5F 50V
2414	4822 126 11309	2,7nF 10%Y5F 50V
2415	4822 124 40435	10µF 20% 50V

2416	4822 124 40435	10µF 20% 50V
2417	4822 122 10183	100pF 5% 50V
2418	4822 122 10183	100pF 5% 50V
2419	4822 122 10166	22nF 30% 16V
2420	4822 122 10166	22nF 30% 16V
2421	4822 124 40433	47µF 20% 25V
2422	4822 124 40433	47µF 20% 25V
2423	4822 122 10183	100pF 5% 50V
2424	4822 122 10183	100pF 5% 50V
2425	4822 122 10183	100pF 5% 50V
2425	4822 126 12224	4,7nF 20% 125V
2426	4822 122 10183	100pF 5% 50V
2427	4822 122 10183	100pF 5% 50V
2428	4822 122 10183	100pF 5% 50V
2429	4822 122 10183	100pF 5% 50V
2430	4822 122 10183	100pF 5% 50V
2431	4822 122 10183	100pF 5% 50V
2432	4822 122 10183	100pF 5% 50V
2433	4822 122 10183	100pF 5% 50V
2434	4822 122 10183	100pF 5% 50V
2435	4822 122 10183	100pF 5% 50V
2436	4822 122 10183	100pF 5% 50V
2437	4822 122 10183	100pF 5% 50V
2438	4822 122 10183	100pF 5% 50V
2439	4822 122 10183	100pF 5% 50V
2440	4822 122 10183	100pF 5% 50V
2441	4822 122 10183	100pF 5% 50V
2442	4822 122 10183	100pF 5% 50V
2443	4822 122 10166	22nF 30% 16V
2444	4822 122 10166	22nF 30% 16V
2445	4822 124 40433	47µF 20% 25V
2446	4822 124 40433	47µF 20% 25V
2447	4822 126 10003	33nF 30% 50V
2448	4822 122 10166	22nF 30% 16V
2455	4822 124 40433	47µF 20% 25V
2456	4822 124 40433	47µF 20% 25V
2457	4822 122 10158	1nF 10% 50V
2459	4822 122 10166	22nF 30% 16V
2460	4822 122 10166	22nF 30% 16V
2464	4822 126 11005	4,7nF 20% 50V
2465	4822 126 11005	4,7nF 20% 50V
2466	4822 126 11005	4,7nF 20% 50V
2467	4822 126 11005	4,7nF 20% 50V
2468	4822 126 11005	4,7nF 20% 50V
2469	4822 126 11005	4,7nF 20% 50V
2470	4822 126 11005	4,7nF 20% 50V
2471	4822 126 11005	4,7nF 20% 50V
2472	4822 126 11005	4,7nF 20% 50V
2473	4822 126 11005	4,7nF 20% 50V
2474	4822 126 11005	4,7nF 20% 50V
2600	4822 124 40435	10µF 20% 50V
2601	4822 121 41754	82nF 10% 100V
2602	4822 121 41754	82nF 10% 100V
2603	4822 124 23179	10µF 16V
2604	4822 124 23179	10µF 16V
2605	4822 122 10181	47pF 5% 50V
2606	4822 122 10181	47pF 5% 50V
2607	4822 122 10183	100pF 5% 50V
2608	4822 122 10183	100pF 5% 50V
2609	4822 122 10183	100pF 5% 50V
2610	4822 122 10183	100pF 5% 50V
2611	4822 124 23176	22µF 16V
2612	4822 124 23176	22µF 16V
2613	4822 124 42368	22µF 35V
2614	4822 124 42368	22µF 35V
2615	4822 122 10166	22nF 30% 16V
2616	4822 122 10166	22nF 30% 16V
2617	4822 122 10177	10nF 20% 25V
2618	4822 124 40242	1µF 20% 63V
2619	4822 122 10177	10nF 20% 25V
2621	4822 121 51409	120nF 5% 63V
2622	4822 121 51409	120nF 5% 63V
2623	4822 121 51409	120nF 5% 63V
2624	4822 121 51409	120nF 5% 63V
2625	4822 126 11311	4,7nF 50V
2626	4822 126 11311	4,7nF 50V
2627	4822 124 41969	1µF 20% 50V
2628	4822 124 41969	1µF 20% 50V
2629	4822 122 10183	100pF 5% 50V
2630	4822 122 10183	100pF 5% 50V
2631	4822 122 33997	56pF 5%NPO
2632	4822 122 33997	56pF 5%NPO
2633	4822 124 23176	22µF 20% 16V
2634	4822 124 23176	22µF 20% 16V
2635	4822 122 10166	22nF 30% 16V
2636	4822 122 10166	22nF 30% 16V
2637	4822 124 42368	22µF 35V
2638	4822 124 42368	22µF 35V
2639	4822 122 10166	22nF
2640	4822 121 42408	220nF 5% 63V
2641	4822 124 22347	47µF 50V
2642	4822 122 31693	560pF 10% 50V
2643	4822 124 40246	4,7µF
2644	4822 124 40242	1µF 20% 63V
2661	4822 122 10166	22nF 30% 16V
2662	4822 122 10166	22nF 30% 16V
2663	4822 126 11311	4,7nF
2664	4822 121 42408	220nF 5% 63V
2667	4822 124 23176	22µF 20% 16V
2668	4822 121 51412	560nF 5% 63V
2669	5322 121 42498	680N 63V
2670	5322 121 42498	680N 63V
2672	4822 126 11311	4N7
2680	4822 122 10177	10nF 20% 25V
2681	4822 122 10177	10nF 20% 25V

RESISTORS

3251	4822 050 24703	47k 1% 0,6W
3252	4822 050 21002	1k 1% 0,6W
3253	4822 050 21002	1k 1% 0,6W
3254	4822 050 22203	22k 1% 0,6W
3255	4822 050 24703	47k 1% 0,6W
3256	4822 050 21003	10k 1% 0,6W
3257	4822 050 24703	47k 1% 0,6W
3258	4822 050 22203	22k 1% 0,6W
3259	4822 050 22203	22k 1% 0,6W
3260	4822 050 24703	47k 1% 0,6W
3261	4822 050 24703	47k 1% 0,6W
3262	4822 050 21803	18k 1% 0,6W
3263	4822 050 24703	47k 1% 0,6W
3266	4822 050 23901	390Ω 1% 0,6W
3267	4822 050 23901	390Ω 1% 0,6W
3268	4822 050 22203	22k 1% 0,6W
3269	4822 050 22203	22k 1% 0,6W
3270	4822 053 10122	1k2 5% 1W
3271	4822 053 10122	1k2 5% 1W
3272	4822 052 10681	680Ω 5% 0,33W
3273	4822 052 10681	680Ω 5% 0,33W
3274	4822 050 22202	2k2 1% 0,6W
3275	4822 050 22202	2k2 1% 0,6W
3276	4822 050 16809	68Ω 1% 0,4W
3277	4822 050 16809	68Ω 1% 0,4W
3278	4822 053 12152	1k5 5% 3W
3279	4822 053 12152	1k5 5% 3W
3280	4822 053 10152	1k5 5% 1W
3281	4822 053 10152	1k5 5% 1W
3282	4822 050 22202	2k2 1% 0,6W
3283	4822 050 22202	2k2 1% 0,6W
3284	4822 101 10927	470Ω
3285	4822 101 10927	470Ω
3286	4822 050 23901	390Ω 1% 0,6W
3287	4822 050 23901	390Ω 1% 0,6W
3288	4822 050 23002	3k 1% 0,6W
3289	4822 050 23002	3k 1% 0,6W
3290	4822 053 10222	2k2 5% 1W
3291	4822 053 10222	2k2 5% 1W
3294	4822 050 23901	390Ω 1% 0,6W
3295	4822 050 23901	390Ω 1% 0,6W
3296	4822 050 23901	390Ω 1% 0,6W
3297	4822 050 23901	390Ω 1% 0,6W
3298	4822 116 52224	470Ω 5% 0,5W
3299	4822 116 52224	470Ω 5% 0,5W
3300	4822 116 52263	2k7 5% 0,5W
3301	4822 116 52263	2k7 5% 0,5W
3302	4822 116 52224	470Ω 5% 0,5W
3303	4822 116 52224	470Ω 5% 0,5W
3304	4822 113 80525	OR15 10% 3W
3305	4822 113 80525	OR15 10% 3W
3306	4822 113 80525	OR15 10% 3W
3307	4822 113 80525	OR15 10% 3W
3308	4822 050 28203	82k 1% 0,6W
3309	4822 050 28203	82k 1% 0,6W
3310	4822 050 21204	120k 1% 0,6W
3311	4822 050 22203	22k 1% 0,6W
3312	4822 050 13303	33k 1% 0,4W
3313	4822 050 22203	22k 1% 0,6W
3314	4822 050 26803	68k 1% 0,6W
3315	4822 050 21501	150Ω 1% 0,6W
3316	4822 050 24702	4k7 1% 0,6W
3318	4822 050 21002	1k 1% 0,6W
3319	4822 050 21002	1k 1% 0,6W
3320	4822 050 21003	10k 1% 0,6W
3321	4822 050 21003	10k 1% 0,6W
3330	4822 050 21003	10k 1% 0,6W
3331	4822 050 21003	10k 1% 0,6W
3332	4822 050 23302	3k3 1% 0,6W
3333	4822 052 10221	220Ω 5% 0,33W
3342	4822 052 10109	10Ω 5% 0,33W
3343	4822 052 10478	4Ω7 5% 0,33W
3344	4822 050 21802	1k8 1% 0,6W
3345	4822 050 21202	1k2 1% 0,6W
3346	4822 053 11331	330Ω 5% 2W
3347	4822 053 11331	330Ω 5% 2W
3348	4822 050 21201	120Ω 1% 0,6W
3349	4822 050 21201	120Ω 1% 0,6W
3350	4822 052 10229	22Ω 5% 0,33W
3354	4822 116 52224	470Ω 5% 0,5W
3355	4822 116 52224	470Ω 5% 0,5W
3356	4822 051 10101	100Ω 2% 0,25W
3357	4822 051 10101	100Ω 2% 0,25W
3358	4822 052 10478	4Ω7 5% 0,33W
3359	4822 052 10478	4Ω7 5% 0,33W
3360	4822 052 10479	47Ω 5% 0,33W
3361	4822 052 10479	47Ω 5% 0,33W
3370	4822 050 22203	22k 1% 0,6W
3371	4822 050 22203	22k 1% 0,6W
3372	4822 050 22203	22k 1% 0,6W
3401	4822 050 23901	390Ω 1% 0,6W
3402	4822 050 23901	390Ω 1% 0,6W
3403	4822 116 52272	330k 5% 0,5W
3404	4822 116 52272	330k 5% 0,5W
3405	4822 050 25603	56k 1% 0,6W
3406	4822 050 25603	56k 1% 0,6W
3407	4822 050 23901	390Ω 1% 0,6W
3408	4822 050 23901	390Ω 1% 0,6W
3409	4822 051 10101	100Ω 2% 0,25W
3410	4822 051 10101	100Ω 2% 0,25W
3411	4822 051 10561	560Ω 2% 0,25W
3412	4822 051 10561	560Ω 2% 0,25W
3413	4822 116 52272	330k 5% 0,5W
3414	4822 116 52272	330k 5% 0,5W

3415	4822 116 52264	27k 5% 0,5W
3416	4822 116 52264	27k 5% 0,5W
3417	4822 051 10101	100Ω 2% 0,25W
3418	4822 051 10101	100Ω 2% 0,25W
3419	4822 116 52234	100k 5% 0,5W
3420	4822 116 52234	100k 5% 0,5W
3421	4822 116 52217	270Ω
3422	4822 116 52217	270Ω
3423	4822 051 10101	100Ω 2% 0,25W
3424	4822 051 10101	100Ω 2% 0,25W
3425	4822 051 10101	100Ω 2% 0,25W
3426	4822 051 10101	100Ω 2% 0,25W
3427	4822 051 10101	100Ω 2% 0,25W
3428	4822 051 10101	100Ω 2% 0,25W
3429	4822 051 10101	100Ω 2% 0,25W
3430	4822 051 10101	100Ω 2% 0,25W
3431	4822 051 10101	100Ω 2% 0,25W
3432	4822 051 10101	100Ω 2% 0,25W
3433	4822 051 10101	100Ω 2% 0,25W
3434	4822 051 10101	100Ω 2% 0,25W
3435	4822 051 10101	100Ω 2% 0,25W
3436	4822 051 10101	100Ω 2% 0,25W
3437	4822 051 10101	100Ω 2% 0,25W
3438	4822 051 10101	100Ω 2% 0,25W
3439	4822 051 10101	100Ω 2% 0,25W
3440	4822 051 10101	100Ω 2% 0,25W
3441	4822 051 10101	100Ω 2% 0,25W
3442	4822 051 10101	100Ω 2% 0,25W
3443	4822 116 52217	270Ω 5% 0,5W
3444	4822 116 52217	270Ω 5% 0,5W
3447	4822 050 23302	3k3 1% 0,6W
3449	4822 116 52217	270Ω 5% 0,5W
3450	4822 116 52217	270Ω 5% 0,5W
3451	4822 116 52234	100k 5% 0,5W
3452	4822 050 24702	4k7 1% 0,6W
3453	4822 050 24702	4k7 1% 0,6W
3455	4822 050 28209	82Ω 1% 0,6W
3600	4822 050 24702	4k7 1% 0,6W
3601	4822 101 21175	50k
3603	4822 101 21176	100k
3605	4822 050 15602	5k6 1% 0,4W
3606	4822 050 15602	5k6 1% 0,4W
3607	4822 050 24703	47k
3608	4822 050 24703	47k
3609	4822 050 21002	1k 1% 0,6W
3610	4822 050 21002	1k 1% 0,6W
3611	4822 050 13303	33k 1% 0,4W
3612	4822 050 13303	33k 1% 0,4W
3613	4822 050 21002	1k 1% 0,6W
3614	4822 050 21002	1k 1% 0,6W
3615	4822 050 21002	1k 1% 0,6W
3616	4822 050 21002	1k 1% 0,6W
3617	4822 050 22202	2k2 1% 0,6W
3618	4822 050 22202	2k2 1% 0,6W
3619	4822 052 10479	47Ω 5% 0,33W
3620	4822 050 22201	220Ω 1% 0,6W
3621	4822 051 10101	100Ω 2% 0,25W
3622	4822 051 10101	100Ω 2% 0,25W
3623	4822 050 24702	4k7 1% 0,6W
3624	4822 050 24702	4k7 1% 0,6W
3625	4822 051 10561	560Ω 2% 0,25W
3626	4822 051 10561	560Ω 2% 0,25W
3627	4822 050 24702	4k7 1% 0,6W
3628	4822 050 24702	4k7 1% 0,6W
3629	4822 051 10561	560Ω 2% 0,25W
3630	4822 051 10561	560Ω 2% 0,25W
3631	4822 050 22202	2k2 1% 0,6W
3632	4822 050 22202	2k2 1% 0,6W
3637	4822 050 21002	1k 1% 0,6W
3638	4822 050 21002	1k 1% 0,6W
3639	4822 116 52234	100k 5% 0,5W
3640	4822 116 52224	470Ω 5% 0,5W
3641	4822 050 24703	47k 1% 0,6W
3645	4822 050 28209	82Ω 1% 0,6W
3646	4822 050 28209	82Ω 1% 0,6W
3647	4822 050 24702	4k7 1% 0,6W
3648	4822 050 24702	4k7 1% 0,6W
3649	4822 051 10182	1k8 2% 0,25W
3650	4822 051 10182	1k8 2% 0,25W
3651	4822 101 21177	20k
3652	4822 101 21177	20k
3653	4822 050 24702	4k7 1% 0,6W
3654	4822 050 24702	4k7 1% 0,6W
3655	4822 051 10182	1k8 2% 0,25W
3656	4822 051 10182	1k8 2% 0,25W
3657	4822 050 21801	180Ω 1% 0,6W
3658	4822 050 21801	180Ω 1% 0,6W
3659	4822 051 10101	100Ω 2% 0,25W
3660	4822 051 10101	100Ω 2% 0,25W
3661	4822 050 25604	560k 1% 0,6W
3662	4822 050 25604	560k 1% 0,6W
3665	4822 052 10479	47Ω 5% 0,33W
3666	4822 050 22201	220Ω 1% 0,6W
3667	4822 050 15602	5k6 1% 0,4W
3668	4822 050 15602	5k6 1% 0,4W
3669	4822 050 21005	1M 1% 0,6W
3670	4822 050 21003	10k 1% 0,6W
3671	4822 116 52197	56Ω 5% 0,5W
3672	4822 050 21003	10k 1% 0,6W
3673	4822 050 21005	1M 1% 0,6W
3674	4822 050 21005	1M 1% 0,6W
3675	4822 050 23901	390Ω 1% 0,6W
3676	4822 051 10182	1k8 2% 0,25W
3677	4822 050 21003	10k 1% 0,6W
3678	4822 052 10228	2Ω2 5% 0,33W
3679	4822 053 11159	15Ω 5% 2W
3680	4822 050 23302	3k3 1% 0,6W
3693	4822 052 10478	4Ω7 5% 0,33W

3696	4822 116 52217	270Ω 5% 0,5W
3697	4822 116 52217	270Ω 5% 0,5W
3698	4822 116 52217	270Ω 5% 0,5W
3699	4822 116 52217	270Ω 5% 0,5W
3700	4822 116 52217	270Ω 5% 0,5W
3702	4822 116 52217	270Ω 5% 0,5W
3703	4822 116 52217	270Ω 5% 0,5W
3704	4822 050 22201	220Ω 1% 0,6W
3706	4822 050 21002	1k 1% 0,6W
3708	4822 050 21002	1k 1% 0,6W
3709	4822 050 21002	1k 1% 0,6W
3710	4822 050 21002	1k 1% 0,6W
3711	4822 050 21002	1k 1% 0,6W
3714	4822 050 21002	1k 1% 0,6W
3724	4822 050 21003	10k 1% 0,6W
3726	4822 050 21003	10k 1% 0,6W
3728	4822 050 21803	18k 1% 0,6W
3730	4822 116 52264	27k 5% 0,5W
3731	4822 116 52264	27k 5% 0,5W
3732	4822 116 52264	27k 5% 0,5W
3733	4822 116 52264	27k 5% 0,5W
3734	4822 116 52264	27k 5% 0,5W
3739	4822 050 24703	47k 1% 0,6W
3740	4822 050 24703	47k 1% 0,6W
3741	4822 050 24703	47k 1% 0,6W
3742	4822 050 24703	47k 1% 0,6W
3744	4822 050 22203	22k 1% 0,6W
3745	4822 116 52235	1M 5% 0,5W
3746	4822 050 24703	47k 1% 0,6W
3747	4822 050 21003	10k 1% 0,6W
3750	4822 050 24702	4k7 1% 0,6W
3751	4822 050 24702	4k7 1% 0,6W
3752	4822 050 24702	4k7 1% 0,6W
3753	4822 050 24702	4k7 1% 0,6W

COILS

5001	4822 145 40189	MAINS TRAFO
5001	4822 146 31094	MAINS TRAFO /01
5252	4822 157 62255	COIL
5253	4822 157 62255	COIL
5254	4822 280 70368	RELAY
5255	4822 280 70368	RELAY
5256	4822 280 70368	RELAY
5601	4822 101 21178	COIL 120MH
5602	4822 101 21178	COIL 120MH
5605	4822 242 72527	CRISTAL 4MHz

DIODES

6252	4822 130 61219	BZX79-C10
6253	4822 130 61219	BZX79-C10
6254	4822 130 30621	1N4148
6255	4822 130 30842	BAV21
6268	4822 130 30621	1N4148
6269	4822 130 30621	1N4148
6270	4822 130 30621	1N4148
6271	4822 130 30621	1N4148
6272	4822 130 30621	1N4148
6273	4822 130 34278	BZX79-C6V8
6274	4822 130 30621	1N4148
6275	4822 130 30621	1N4148
6276	4822 130 30621	1N4148
6277	4822 130 30621	1N4148
6278	5322 130 30684	1N4002GP
6279	5322 130 30684	1N4002GP
6280	5322 130 30684	1N4002GP
6281	5322 130 30684	1N4002GP
6282	4822 130 34281	BZX79-C15
6283	4822 130 82078	D5SBA20
6286	4822 130 30621	1N4148
6287	4822 130 30621	1N4148
6288	4822 130 30621	1N4148
6289	4822 130 30621	1N4148
6290	4822 130 30621	1N4148
6291	4822 130 30621	1N4148
6292	4822 130 30621	1N4148
6293	4822 130 30621	1N4148
6294	4822 130 30621	1N4148
6295	4822 130 30621	1N4148
6296	4822 130 30621	1N4148
6298	4822 130 34281	BZX79-C15
6299	4822 130 30621	1N4148
6301	4822 130 34499	BZX79-C20
6303	4822 130 30621	1N4148
6304	4822 130 30621	1N4148
6318	4822 130 30621	1N4148
6319	4822 130 30621	1N4148
6320	4822 130 30621	1N4148
6321	4822 130 30621	1N4148
6402	4822 130 34268	BZX79-C16
6601	4822 130 30621	1N4148
6603	4822 130 30621	1N4148
6604	4822 130 34278	BZX79-C6V8
6605	4822 130 34278	BZX79-C6V8
6606	4822 130 30621	1N4148
6607	4822 130 30621	1N4148
6608	4822 130 30621	1N4148
6609	4822 130 34499	BZX79 C20
6610	5322 130 30684	1N4002
6611	4822 130 30621	1N4148
6612	4822 130 34233	BZX79-C5V1
6613	4822 130 31253	BZX79-C2V4
6614	4822 130 34167	BZX79-C6V2
6615	4822 130 34174	BZX79-C4V7
6616	4822 130 34167	BZX79-C6V2

6617	4822 130 34499	BZX79-B20
6632	4822 130 30621	1N4148
6633	4822 130 30621	1N4148
6635	4822 130 82978	LED
6637	4822 130 82978	LED
6638	4822 130 82978	LED
6639	4822 130 82978	LED
6640	4822 130 82978	LED
6648	4822 130 82978	LED
6650	4822 130 82978	LED
6651	4822 130 82978	LED
6652	4822 130 82978	LED
6653	4822 130 82978	LED
6654	4822 130 82978	LED
6655	4822 130 82978	LED
6666	4822 130 82978	LED
6690	5322 130 34834	BZX79-C3V6
6691	5322 130 34834	BZX79-C3V6
6692	5322 130 34834	BZX79-C3V6
6693	5322 130 34834	BZX79-C3V6
6700	4822 214 52009	GP1U58XP

TRANSISTORS & IC's

7250	4822 130 40937	BC548B
7251	4822 130 40937	BC548B
7252	4822 209 80891	78M05CT
7255	4822 209 83274	NJM4560D
7256	4822 130 41691	BC556B
7257	4822 130 41691	BC556B
7258	4822 130 42607	BF483
7259	4822 130 42607	BF483
7260	4822 130 60117	2SC3419
7261	4822 130 60117	2SC3419
7264	4822 130 40937	BC548B
7265	4822 130 40937	BC548B
7266	4822 130 44197	BC558B
7267	4822 130 44197	BC558B
7268	4822 130 62963	B2SD1894
7269	4822 130 62963	B2SD1894
7274	4822 130 62962	B2SD1254
7275	4822 130 62962	B2SD1254
7276	4822 130 40937	BC548B
7277	4822 130 44461	BC546B
7279	4822 130 44461	BC546B
7280	4822 130 44461	BC546B
7281	4822 130 62952	BDT61F
7282	4822 130 40824	BD136
7283	4822 130 40937	BC548B
7284	4822 130 40937	BC548B
7285	4822 130 40937	BC548B
7286	4822 130 40941	BC558
7287	4822 130 40937	BC548B
7288	4822 130 40937	BC548B
7401	4822 209 70157	NJM4560DD
7402	4822 209 72748	LC7821
7404	4822 209 30986	IC LC4966
7405	4822 130 40937	BC548B
7601	4822 130 40937	BC548B
7602	4822 130 40937	BC548B
7603	4822 209 30941	NJM2068D
7604	4822 130 40937	BC548B
7605	4822 209 10263	HEF4052BP
7607	4822 130 40937	BC548B
7608	4822 130 40937	BC548B
7609	4822 209 83274	NJM4560D
7610	4822 209 63667	BA6229
7611	5322 130 42216	TL081CP
7612	4822 130 44197	BC558B
7631	4822 130 40937	BC548B
7633	4822 130 40937	BC548B
7636	4822 130 40937	BC548B
7639	4822 130 44197	BC558B
7647	5322 209 11532	74HC4094P
7648	5322 209 11532	74HC4094P
7649	4822 209 30882	NM93C13BN
7650	4822 209 30881	MICRO PROCESS.

Service
Service
Service

Product Service Group CE Audio

Service Information

70FA920

In order to prevent early failure of powertransistors following changes are necessary :
-Add two electrolytic capacitors 100µF 10V (items 2301,2302) service codenumber 4822 124 41584 across **Collector** and **Emitter** of transistor 7260 (right channel) and 7261 (left channel) with the positive side of the capacitor connected to the collector. see fig. 1 or fig. 2
-*The most practical way to connect the two capacitors is to mount them at the coppertrack side.

There are two versions of sensing transistor 7260,7261 :
From production start the transistor is BC548B. see fig. 1

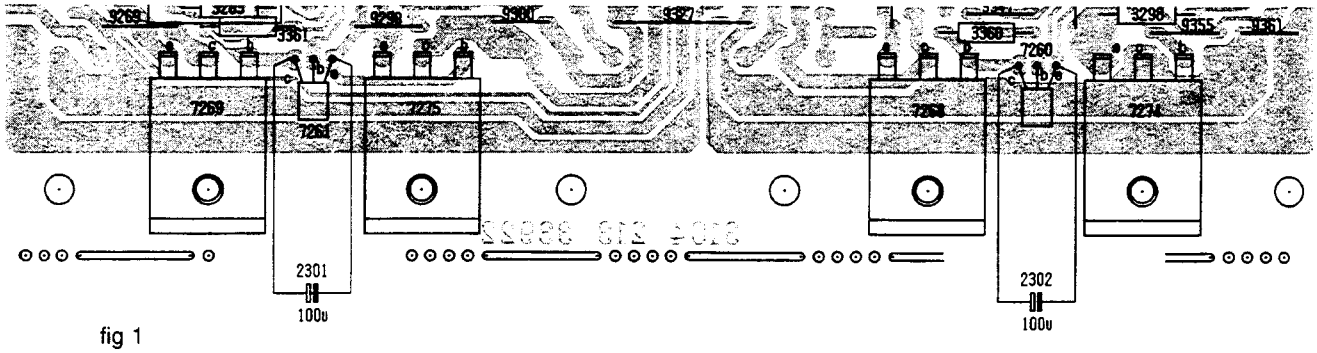


fig 1

From week 9232 another transistor type 2SC3419 is used. see fig. 2
This transistor has a TO-126 housing and is screwed on the heatsink.

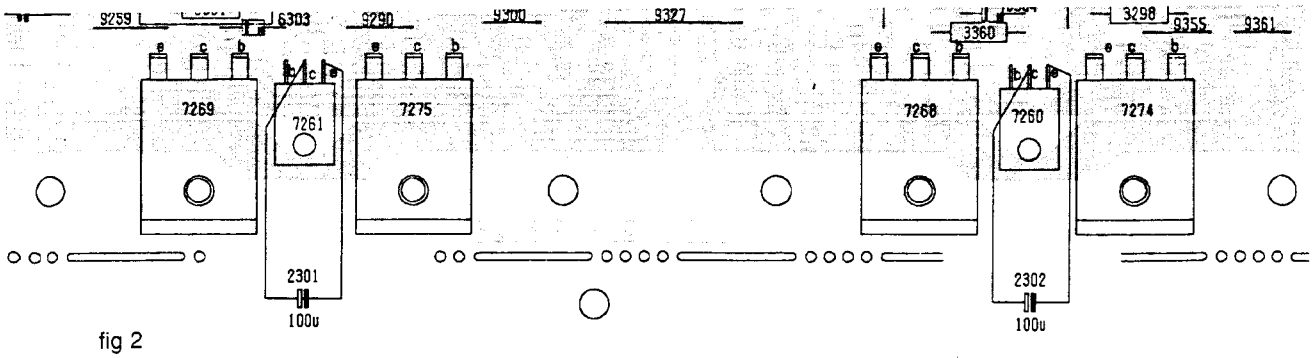
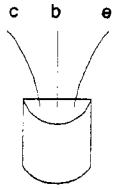
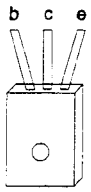


fig 2

The difference between both transistor versions is important for the connection of the capacitor on collector and emitter because the pinning of the transistors is different.



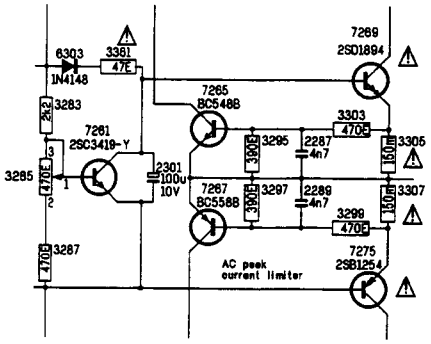
BC548

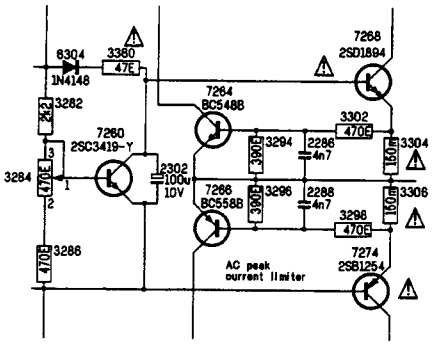


2SC3419

Remarks:
It is necessary that in **every** set which needs to be repaired,no matter the complaint,the above mentioned changes are introduced.If the repair is a defective powerendstage than it is also necessary that new powertransistors are soldered in both left and right channel.
The powertransistors to be replaced are:

items	Type	servicecodenumber
7268-7269	2SD1894	4822 130 62963
7274-7275	2SB1254	4822 130 63073





***For sets produced in week 9313 and later both capacitors are already assembled.**

***For sets produced before week 9313 it is possible that these capacitors are already added in some service centres.This can be seen at the elco added between collector emitter of transistor 7260 and 7261 at the solderside of the power print.**